Beyond the Illusion of Stability: The Case for Valuation Discipline in Private Markets

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Introduction

Since the global financial crisis, institutional investors have undertaken a structural reallocation toward private markets, driven by persistent yield compression in public assets, a search for diversification, and cautiously increasing confidence in governance and valuation practices for alternative investments. According to Gallary (2024), institutional portfolios have steadily increased exposure to private equity, infrastructure, and private credit, reflecting a long-term shift in strategic asset allocation designed to enhance outcomes for defined contribution and pension participants. Industry analyses by (McKinsey, 2024) and (Bain and Company, 2025) indicate that global private market assets under management (AUM) surpassed USD13 trillion in 2023, growing at double-digit annual rates since 2010. With Pitchbook (2025)'s recent industry projections, global private capital assets under management are expected to reach around USD18.7 trillion by 2025 and grow further to approximately USD24.1 trillion by 2029. This trajectory underscores how large private markets have become relative to public markets and strengthens the case for treating valuation governance as a matter of systemic importance rather than a narrow technical concern. Together, these findings underscore the mainstreaming of private markets as a central pillar of institutional investment worldwide. As private assets assume this systemic importance, the credibility of their valuations becomes equally critical. Timely and accurate valuation is not an accounting technicality but the operational expression of fairness, fiduciary duty, and systemic safety. Without regular, transparent updates, private markets risk substituting judgment for discipline and opacity for accountability. Frequent, well-governed fair-value assessments are therefore essential not only for accurate reporting but also for sustaining confidence in the legitimacy and resilience of the private-asset ecosystem.

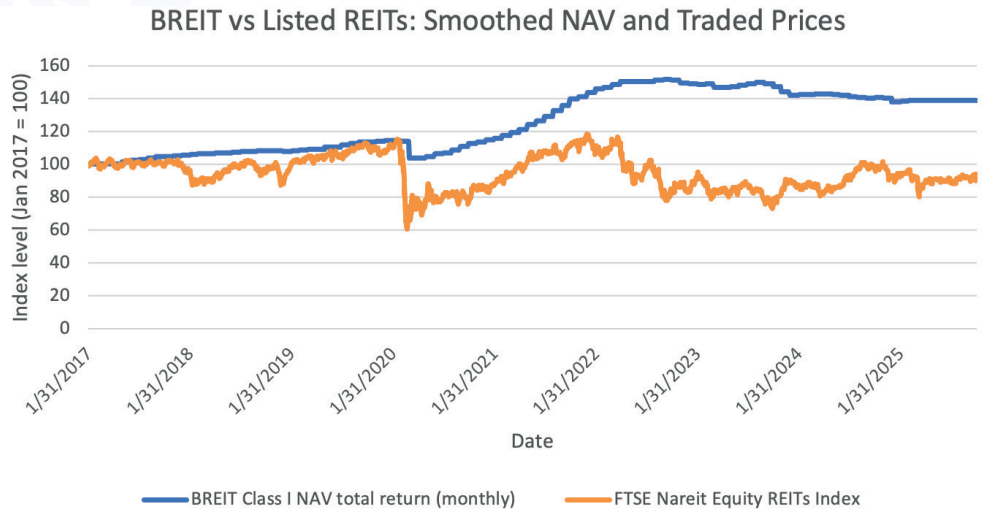
The Valuation Debate and the "Illusion of Stability"

Proponents of infrequent valuation argue that private markets are fundamentally illiquid and idiosyncratic, rendering short-term fair values less meaningful than long-term realised returns. In their view, quarterly or monthly revaluations of unique, cash-flow-driven assets impose high costs while delivering limited informational benefit. Each valuation exercise relies on modelled assumptions and subjective parameters, such as discount rates, growth forecasts, and market multiples. These cannot be refreshed meaningfully without real transaction evidence.

The argument continues, stating that forced, high-frequency revaluation may import public-market volatility into asset classes explicitly designed to not be volatile. Illiquid assets are held for strategic, long-duration purposes, such as matching pension liabilities or stabilising sovereign wealth portfolios, not for short-term trading. Imposing mark-to-market discipline risks encouraging herding behaviour and short-termism, diverting governance attention from long-run value creation to temporary valuation noise. This echoes the critique raised by Plantin, Sapra and Shin (2008) that fair-value volatility can transmit unnecessary balance-sheet shocks, amplifying pro-cyclicality rather than improving discipline.

Moreover, fund managers point to operational and economic frictions. As each independent valuation involves appraisal fees, data collection, and auditor oversight, costs are ultimately borne by investors. In asset classes such as infrastructure or real estate, where valuations rely on bespoke engineering, regulatory, and contractual models, the effort required for quarterly re-marking may exceed the benefit. Laux and Leuz (2009) likewise note that fair-value mandates, when applied indiscriminately, can overstate volatility and distort long-term incentives in thinly traded markets.

Figure 1: Smoothed NAV vs traded REIT prices



Source: Bloomberg
Notes: BREIT Class I net asset value total-return index (blue, monthly, normalised to 100 in January 2017) compared with the FTSE Nareit Equity REITs Index (orange, daily total return, USD). The listed REIT index exhibits large, rapid drawdowns during the COVID-19 shock and subsequent interest-rate tightening cycle, while the appraisal-based BREIT NAV adjusts gradually and with a much smaller peak-to-trough decline, illustrating the "illusion of stability" created by smoothed valuations.

However, the "illusion of stability" produced by valuation smoothing does not mitigate pro-cyclicality; it merely defers and concentrates it. As Plantin, Sapra and Shin (2008) caution, postponing the recognition of underlying losses masks risks until they have become too large to manage.

The Valuation Debate and the "Illusion of Stability"

When smoothed valuations are finally forced to converge toward market reality, the adjustment can be sudden, correlated and destabilising. In that sense, smoothing does not reduce volatility so much as transform it—from a pattern of continuous, manageable fluctuations into a discontinuous collapse that occurs only once the crisis is already under way.

This dynamic is evident in the recent experience of non-traded NAV REITs. Blackstone's BREIT, for example, reported a much smoother net asset value path than listed U.S. REIT indices during the COVID-19 shock and the 2022–23 interest-rate tightening cycle, despite investing in broadly similar underlying property markets. Figure 1 compares the NAV-based total return of BREIT with the FTSE Nareit Equity REITs Index . The listed index exhibits sharp drawdowns and rapid recoveries, whereas the appraisal-based BREIT NAV adjusts gradually with a much smaller peak-to-trough decline, illustrating the "illusion of stability" created by valuation smoothing.

From a systemic perspective, this is more dangerous than accepting "noisy" fair values. The idiosyncratic component of fair-value noise tends to diversify away in the cross-section, whereas a regime of smoothed marks suppresses information about losses in a common direction and thereby amplifies their eventual impact. By "kicking the can down the road", smoothed valuations increase the systematic component of risk and make market swings more synchronised when they finally occur, with more severe and pro-cyclical consequences. The small, continuous pain of recognising valuation fluctuations in real time is therefore a form of insurance: it helps to prevent the large asset-allocation dislocations that can follow extreme events, when disappointed investors may retreat from private markets altogether.

The "Smoothing-as-Stability" Narrative

A related strand of this argument defends valuation smoothing as a deliberate design feature, not a bug. In this view, smoothing mitigates "noise" arising from model volatility and preserves investor confidence during market stress. Pension and insurance executives sometimes claim that smoothing helps avoid "unnecessary de-risking" or forced asset sales when short-term marks deviate from intrinsic value. This rationale is echoed in actuarial and supervisory contexts where understated volatility is seen as a means of sustaining long-term funding stability.

Practitioners such as private equity general partners contend that valuations should be judged at exit, where true performance is realised. Interim marks are seen as provisional estimates that distract from the core objective of long-term value creation and may even trigger counterproductive behaviours, such as premature manager replacement or investor withdrawals. Sovereign wealth funds often invoke this logic to justify annual or semi-annual revaluations, arguing that their intergenerational mandates render interim fluctuations largely irrelevant to their objectives

The Illusion of Stability: Why Interim Valuations for Private Assets Are Not Just Noise

In much of the private markets industry, interim valuations are still treated as a procedural nuisance, inconsequential "noise" that distracts from the supposedly only thing that matters: long-term value creation. Fund managers and long-horizon investors often argue that private assets should be

judged solely on exit IRRs or multi-year performance, preaching patience and dismissing interim volatility as irrelevant to the strategic horizon. This is not a harmless simplification; it is a dangerous fallacy that runs against established standards and undermines the integrity of the financial system. Far from being noise, well-executed interim valuations provide a vital signal. They are essential for investor protection, risk management, market efficiency, and systemic stability. Moreover, they improve capital allocation: sectors and strategies that are genuinely performing well can demonstrate this sooner and attract fresh capital more quickly. In doing so, credible fair values can also help to unlock liquidity. The industry often cites illiquidity as the reason for avoiding fair value marks, but this is increasingly a chicken-and-egg problem: reluctance to mark to fair value perpetuates opacity and illiquidity, which in turn is used to justify extended holding periods and further smoothing. Interim valuations, if done properly, break this loop by making performance visible, comparable, and investable.

Investor Rights and Protections

A central challenge in private asset investing is the information asymmetry between limited partners (LPs) and general partners (GPs). LPs delegate control over capital to fund managers but retain residual claims on returns, creating a classic principal–agent problem (Jensen and Mecking, 1976). Interim valuations play a crucial role in mitigating this asymmetry. Without effective monitoring and credible performance assessments, investors cannot ensure that managers adhere to investment mandates or deploy capital responsibly (see Kaplan and Strömberg, 2009). Regular valuations enable LPs to benchmark performance, detect deviations from stated strategies, and enforce contractual rights through governance mechanisms such as advisory committees or covenants. In this way, interim valuations strengthen accountability and serve as an essential monitoring device that reduces agency costs.

Additionally, private market investments are characterized by illiquidity and limited disclosure, creating opportunities for opportunistic behaviour by fund managers (Robinson and Sensoy, 2013). Managers may smooth valuations to inflate reported performance, delay the recognition of losses to avoid adverse investor reactions, or selectively disclose information that favours their own compensation and fundraising prospects (Ang, Papanikolaou and Westerfield, 2018). Interim valuations that are accurate, transparent, and independently verifiable help to constrain this discretion.

The policy importance of credible interim valuations was underscored by the U.S. Securities and Exchange Commission (SEC) in 2023 (see U.S. Securities and Exchange Commission, 2023), when it adopted rules requiring private equity and venture capital funds to provide quarterly statements with fund-level performance and interim valuations for investors. Although these rules were later invalidated, the initiative made explicit a growing regulatory concern: opaque or highly discretionary valuation practices create moral hazard, weaken accountability, and impair the functioning of contracts between LPs and GPs. Valuations are not just a reporting artefact; they are the informational backbone of fee calculations, performance assessment, and re-up decisions.

Without verifiable and decision-useful interim marks, LPs struggle to discriminate GP quality, especially across managers with similar narratives but very different risk-taking and governance practices. This echoes evidence from credit markets, where frequent and transparent pricing in commercial paper markets allows investors to identify and reward high-quality issuers—with the result that some top-tier firms can even borrow at spreads below their sovereign benchmark. In private markets, robust interim valuations can play an analogous role: by enabling repeated, data-rich contracting, they help capital flow toward better-managed funds and away from weaker ones. Accurate interim marks therefore serve simultaneously as an internal governance device, a contracting technology that improves LP–GP matching, and a regulatory safeguard that supports the integrity and efficiency of private markets.

Beyond monitoring and deterrence of misconduct, interim valuations are critical to ensuring the fair treatment of investors. Valuations affect secondary sales, redemptions, and restructuring decisions, where inaccurate pricing can lead to cross-subsidisation between investor cohorts. For example, if valuations are artificially inflated, incoming investors may overpay for interests, while exiting investors receive unjustified gains at the expense of remaining LPs (Phalippou, 2020). Conversely , understated valuations may deter secondary market activity and limit investor liquidity options.

The SEC's 2023 reforms also reflected these fairness concerns: by mandating quarterly valuation disclosures, the Commission aimed to ensure that all investors, whether entering, remaining, or exiting a fund, were operating with consistent and up-to-date information (U.S. Securities and Exchange Commission, 2023). Although not ultimately implemented, the reforms underscore that reliable valuations are a cornerstone of equitable treatment in private markets. Accurate interim marks thus protect investors not only from opportunism but also from inequitable outcomes in transactions that depend on fair pricing, reinforcing confidence in the asset class as a whole.

In essence, interim valuations function as a vital governance mechanism. By mitigating information asymmetry, constraining managerial opportunism, and ensuring equitable treatment across investor cohorts, accurate and timely marks are not merely procedural but are fundamental to upholding investor rights and maintaining confidence in the asset class.

Risk Measurement, Governance, and Systemic Oversight

Accurate interim valuations underpin not only investor protections but also the ability to measure and manage portfolio risk, allocate capital efficiently, and ensure institutional accountability. Valuations inform estimates of volatility, correlations, and returns; when they are stale or smoothed, they understate true risk and distort diversification metrics (Getmansky, Lo and Makarov, 2004). This "phantom stability" gives the illusion of low risk and high returns, encouraging capital misallocation and masking downside exposures (Brown, Gredil and Kaplan, 2019). In contrast, timely valuations using up-to-date inputs ensure that private asset portfolios reflect prevailing market and idiosyncratic conditions, allowing risk managers to model volatility realistically, conduct stress tests, and assess adverse scenarios.

As Ang, Chen, et al. (2018) note , unlisted assets like private equity, real estate, and infrastructure, exhibit distinct risk profiles in liquidity, tail risk, and cyclicality. Inaccurate valuations compromise the measurement of these risks, leading investors to misjudge diversification benefits and distort risk budgeting. Reliable valuations thus serve as the bridge between strategic asset allocation and day-to-day risk oversight, ensuring that private markets consume neither more nor less risk capital than intended.

At the systemic level, valuation accuracy has macroprudential implications. Overstated or delayed recognition of losses in private funds can conceal emerging stresses, triggering abrupt repricing during liquidity shocks, as seen during the Global Financial Crisis. Regulators have noted that opaque valuation practices and uncertainty around fair value estimates can amplify systemic vulnerabilities, particularly in non-bank financial intermediation (Financial Stability Board, 2017). Accurate and timely valuations help contain contagion risk, align capital buffers with true exposures, and prevent the buildup of hidden leverage and procyclical feedback effects (Plantin, Sapra and Shin, 2008).

From a governance perspective, valuation accuracy empowers boards, investment committees, and regulators to act on risk signals. Measurement produces data, but oversight ensures accountability. As Jensen and Mecking (1976) emphasise, monitoring reduces agency costs, while the Financial Stability Board (2017) notes that supervisors depend on valuation data to assess systemic resilience.

Institutional oversight structures rely on interim valuations to determine whether exposures remain within mandates, concentration risk is rising, or liquidity buffers are adequate. Without accurate valuations, fiduciary bodies cannot enforce portfolio discipline or ensure that delegated managers remain aligned with long-term objectives.

Ultimately, accurate valuations are the link between risk identification and effective action. They transform risk from an unquantified threat into a managed exposure, enabling both institutional and regulatory mechanisms to operate with transparency and credibility. By ensuring that risk is properly measured, governed, and contained, valuations safeguard not only portfolio integrity but also financial stability.

Market Efficiency and Price Discovery

We now turn to the contested role of interim valuations in private markets and their role in market efficiency and price discovery. In private markets, where continuous trading and public price signals are absent, interim net asset values (NAVs) serve as crucial informational benchmarks. These valuations, typically disclosed to LPs and prospective secondary buyers during due diligence, provide private but credible reference points for negotiations (Jenkinson, Sousa and Stuke, 2013). Rather than functioning as transparent market-clearing prices, interim NAVs help narrow bargaining ranges, reduce informational frictions, and discipline expectations in otherwise opaque markets (ILPA, 2020). In this sense, interim valuations contribute indirectly to market efficiency by shaping investor perceptions and providing the informational scaffolding for bilateral price discovery, even if they fall short of full public transparency.

Empirical evidence suggests that interim valuations carry meaningful informational content. Albuquerque et al. (2018) show that bids in secondary markets decline in response to liquidity shocks, particularly for younger funds, consistent with NAVs interacting with asymmetric information and valuation uncertainty. More recently, Ercan, Kaplan and Strevulaev (2025) demonstrate that interim valuation patterns are predictive of final investment outcomes, providing evidence that interim marks are not merely cosmetic. Johan and Zhang (2020) further document that funds with more frequent general partner reporting display reduced information asymmetry in their communications to limited partners. Together, these strands indicate that interim valuations help transmit private information into pricing signals that shape transaction outcomes.

The influence of interim valuations is most visible in secondary markets, where GP-reported NAVs often anchor transaction prices. Jenkinson, Sousa and Stuke (2013) find that secondary market trades are frequently benchmarked against prior NAVs, despite evidence of valuation smoothing and potential inflation around fundraising periods. This anchoring effect suggests that interim valuations, while imperfect, reduce uncertainty and facilitate trading by providing common benchmarks for negotiation (ILPA, 2020).

In conclusion, while private market NAVs are not public market prices, they serve as indispensable informational anchors. By providing a common reference point, they reduce bargaining frictions, discipline negotiations, and support the growth of a more liquid and efficient secondary market.

Far from being irrelevant, they are the very bedrock upon which price discovery in an opaque market is built.

Private asset interim valuations are, in fact, a critical signal with profound implications across the market. For investors, they are the bedrock of governance, mitigating the principal-agent problem and ensuring fairness. For risk managers and regulators, they dispel the dangerous "illusion of stability," allowing for accurate risk measurement and effective systemic oversight. Finally, for the market itself, they serve as the essential informational anchors that facilitate price discovery and support the growth of liquidity.

Ultimately, accurate and timely interim valuations are not a distraction from long-term value creation; they are the very mechanism that ensures the integrity, transparency, and stability required to achieve it. To dismiss their signal is to wilfully ignore the risks that threaten investors, institutions, and the broader economy.

In the next section, we examine why interim valuations matter across stakeholder perspectives, from defined contribution and defined benefit pension plans to insurance companies and sovereign wealth funds. In particular, we consider why defined contribution schemes should be especially concerned with the timeliness and accuracy of interim valuations, given their need to report fair and transparent unit prices to plan participants, manage liquidity for redemptions, and uphold fiduciary accountability in retirement savings.

Institutional Consequences

Interim valuations in private funds are not a uniform concern. Their significance depends on the nature of the institution holding these assets, the promises it makes to beneficiaries, and the regulatory environment in which it operates. For some stakeholders, inaccurate interim valuations primarily raise questions of fairness between individual investors. For others, the risks are systemic, shaping assessments of solvency, fiscal policy, or even national wealth.

Table 1 summarises the different channels that untimely or poorly conducted valuations flow through to the primary stakeholders. These channels and consequences are discussed in more detail in the following section. Defined contribution (DC) pension plans, for example, are uniquely exposed because members transact daily, meaning that stale or smoothed NAVs can generate hidden wealth transfers between cohorts. Defined benefit (DB) pensions, by contrast, must assess their ability to meet long-dated liabilities; understated volatility or overstated solvency can delay necessary corrective action and increase long-run costs. Insurance companies rely on timely valuations for regulatory capital, reserving, and fair treatment of policyholders, making valuation integrity central to both consumer protection and financial stability. Sovereign wealth funds (SWFs), finally, operate at the frontier of national balance sheets: interim valuations affect not only intergenerational equity and portfolio management, but also fiscal transfers, sovereign creditworthiness, and public trust.

Table 1

Stakeholder	Primary Channel	Consequence of Delay
DC Pension Funds	Member equity and unit pricing	Cross-subsidisation, liquidity mismatch
DB Pension Funds	Solvency and funding ratios	Misstated liabilities, intergenerational inequity
Insurers	Capital adequacy, liquidity management	False solvency ratios, liquidity illusions
Sovereign Wealth Funds	Governance, fiscal transparency	Loss of accountability, impaired stabilisation role

By examining interim valuations through the lens of these different stakeholders, we can see that they are not mere accounting artifacts. They are central to the credibility of retirement saving, the solvency of pension and insurance promises, and the legitimacy of public wealth management. The following sections explore these dynamics in turn. We begin first with DC plans before exploring DBs, insurers and SWFs in turn.

Defined Contribution Plans

In DC pension systems, sound valuation practices and transparent member-account pricing are integral to fairness and sustaining confidence. Because individual balances directly reflect investment outcomes and entitlements, delays, inaccuracies, or opaque processes can undermine member outcomes and erode trust. The OECD (2022a) highlights the importance of strengthening asset-backed (including DC) arrangements through robust governance and communication to support member confidence, while the OECD (2022b) sets out design and oversight elements that protect members' interests.

Institutional Consequences

The need for timely and accurate valuations is especially important in defined-contribution systems (or large pooled accounts) that permit frequent member transactions but invest in less-liquid assets such as infrastructure, real estate or private equity. If portfolio valuations lag actual market dynamics, members entering or departing may transact at prices that do not reflect current economic value, raising fairness issues across cohorts. Over time, such mispricing can undermine confidence in the system, distort performance measurement and fee-allocation, and degrade capital-allocation decisions across multi-asset portfolios. For example, the Australian Prudential Regulation Authority (APRA)'s 2024 review of Australian superannuation funds found "particular weaknesses … in revaluation frequency and triggers" of unlisted assets and flagged the risk of liquidity mismatches in funds with large unlisted allocations (see APRA, 2024). Meanwhile the Financial Stability Board (2017) details policy recommendations on open-ended fund liquidity risk emphasises the structural vulnerability posed when investor redemption rights are mismatched with asset-pricing and liquidity profiles.

Valuation lags and smoothing practices can have significant behavioural and systemic consequences. When asset valuations do not keep pace with market movements, investors may underestimate portfolio risk and misjudge the liquidity of their holdings. This can foster excessive allocations to illiquid assets or lead to abrupt shifts when market conditions change. In Australia, concerns about the governance of unlisted-asset valuations in superannuation funds have been longstanding. The *Super System Review* (Cooper Review, 2010) noted the need for stronger governance, transparency, and consistency in unit pricing and valuation practices, while the APRA has repeatedly emphasised independent and frequent valuations as central to robust liquidity-risk management (APRA, 2024). Internationally , valuation-related stresses have also emerged. Following the 2016 Brexit referendum and again during the 2020 pandemic, several UK open-ended property funds suspended redemptions after independent valuers invoked "material valuation uncertainty" clauses, citing an inability to determine reliable market prices (Financial Conduct Authority, 2017); (Financial Conduct Authority, 2020). More broadly, the Financial Stability Board (2023) has highlighted liquidity mismatches in open-ended funds as a key structural vulnerability, noting that inaccurate or lagged valuations can amplify redemption pressures and undermine confidence in fund pricing.

An example of large investors getting valuations wrong for DC plans is provided by HESTA in 2020. During the Covid-19 crisis, the Australian Government's Early Release Scheme allowed members in financial hardship to withdraw up to AUD 20,000 from their superannuation accounts, placing pressure on funds holding large exposures to illiquid and unlisted assets (APRA, 2020). HESTA , a large superannuation fund, undertook an out-of-cycle revaluation of unlisted assets in March 2020, but applied the resulting valuation changes to some investment options a week earlier than others. This created scope for inequitable outcomes among members switching between options, with some members materially worse off (APRA, 2024a). APRA subsequently concluded that HESTA's out-of-cycle valuation processes were inadequate and that the decision was unfair to certain cohorts of members, and required HESTA to make compensation payments to affected members (APRA, 2024a). These episodes show that valuation problems in DC funds reflect a structural mismatch rather than isolated governance failures. DC designs promise frequent pricing, switching and, in some cases, rapid access to savings, while portfolios increasingly hold illiquid assets whose fair values are hard to observe and can change abruptly. When valuations lag market conditions or are applied inconsistently

across options, the result is not only unfair wealth transfers between cohorts of members but also erosion of trust in the integrity of unit prices. The apparent smoothness of reported returns can conceal latent risk, delay necessary portfolio adjustments and encourage member behaviours that are misaligned with the true risk profile of the fund. By contrast, responsive and transparent valuation practices, supported by independent oversight and data-driven valuation tools, enhance confidence in unit pricing and help protect members from the cascading effects of valuation shocks.

In recognition of these risks, regulators have strengthened their expectations for valuation governance in DC funds. In Australia, APRA has updated its standards to require more stringent oversight of unlisted asset valuations (see Australian Prudential Regulation Authority, 2023). These reforms go beyond the existence of a written valuation policy. Boards and trustees are now expected to take direct accountability for valuation frameworks, supported by independent committees with the technical expertise to challenge assumptions and methodologies. Valuations must be performed independently of portfolio managers to avoid conflicts of interest, with external valuers engaged regularly and full audit trails maintained to evidence key judgments. Effective governance also entails continuous review: back-testing valuations against actual transaction prices, monitoring model performance, and ensuring prompt escalation when market conditions render prior valuations unreliable. In essence, regulators now expect DC funds to demonstrate not only compliance but a culture of active challenge, transparency, and fairness to members (APRA, 2024).

Emerging valuation technologies offer new ways to meet these expectations. Advances in data integration, secondary market benchmarking, and machine-learning–based appraisal models allow for more frequent, objective, and evidence-based valuations of unlisted assets. For DC schemes, where unit pricing directly determines member entitlements, these tools can significantly reduce valuation lags and mitigate inter-member wealth transfers. They also enhance auditability and supervisory confidence, aligning valuation processes with international fair value standards such as IFRS 13. Importantly, the objective in DC funds is transactional fairness, ensuring each member's unit reflects a current and consistent view of asset value. In contrast, DB plans face a distinct valuation challenge centred on solvency and liability measurement rather than daily member pricing. The following section explores how valuation technology supports these differing objectives in the DB context.

Defined Benefit Plans

While flawed valuation approaches in DC plans distort transactional fairness between members, in DB plans they distort the measurement of solvency itself. DB pension plans should be acutely concerned about the accuracy and timeliness of their unlisted asset valuations because stale or inflated values can mask a plan's true financial health. This misrepresentation leads to flawed risk management, incorrect contribution calculations, potential breaches of fiduciary duty, and unfair outcomes for different generations of members. Unlike DC systems, where individual members bear investment risk directly, DB arrangements promise a pre-defined stream of future benefits based on salary and service, transferring investment and longevity risks to the plan sponsor.

Institutional Consequences

The financial position of a DB pension plan is conventionally evaluated through its funding ratio, defined as the market (or fair) value of plan assets relative to the present value of its accrued liabilities. Under international accounting standards, DB obligations are measured as the present value of the defined benefit obligation, while plan assets are recognised at fair value (see IASB, 2011a; IASB, 2011b). Consequently, any misstatement in asset valuations, particularly for illiquid or infrequently traded holdings such as private equity, private credit, real estate, and infrastructure, directly affects the reported funding ratio and may obscure the true solvency position of the plan.

Accurate and timely valuations are therefore essential to ensure that the reported funding position reflects the economic reality of the scheme. Mis-measurement of either assets or liabilities can distort contribution requirements, risk assessments, and investment decisions, potentially undermining both funding discipline and sponsor solvency (see OECD, 2022c; IASB, 2011a). Supervisory bodies have likewise emphasised that valuation practices form the foundation of prudent pension solvency oversight (OECD/IOPS, 2008).

Valuation errors have material implications for funding policy and sponsor behaviour. When asset values are overstated, schemes appear better funded than they are, leading trustees and sponsors to reduce contributions or to approve benefit enhancements that the plan cannot sustain. This false sense of security can conceal structural vulnerabilities until market corrections expose the shortfall, often necessitating abrupt, pro-cyclical increases in employer contributions. Thus, in an economic downturn, apparently well-funded DB plans may unravel with negative consequences for plan participants, effectively transferring the risk to employees, which the DB plan is supposed to mitigate. Conversely, undervaluing assets can exaggerate deficits, prompting unnecessary de-risking or premature cash injections that misallocate capital and weaken long-term investment outcomes.

These concerns are amplified in the context of infrastructure allocations. Andonov, et al. (2021) observe that infrastructure investments via closed-end private vehicles behave with volatility and cyclicality comparable to private equity, challenging the common perception of infrastructure as a low-risk, stable asset class. From a supervisory perspective, transparent, comparable and high-quality information, including asset valuations, is a key enabler of pension-fund resilience and sectoral stability. Incorrect valuations of illiquid/private assets may thus obscure true exposures, delay corrective responses and raise systemic risks in pension provision. Accurate and timely valuations are the bedrock of sound asset–liability management (ALM). Pension fiduciaries rely on metrics such as volatility and correlation to construct diversified portfolios capable of meeting long-term obligations. Unlisted assets are often prized for their perceived low correlation with public markets, offering a diversification benefit. However, this benefit may be overstated due to appraisal-based, smoothed valuations. Because unlisted assets are not traded daily, their reported values change infrequently, creating artificially low volatility and correlation figures.

This phenomenon, often termed the "diversification illusion," can lead to an underestimation of the plan's true portfolio risk. Research by Getmansky, Lo and Makarov (2004) demonstrated how serial correlation in reported returns can significantly understate volatility. Because assets with high serial correlation tend to appear less correlated with liquid asset classes that exhibit little serial correlation,

the overall portfolio may seem more diversified than it truly is. As a result, a pension plan that over allocates to unlisted assets based on these flawed metrics may be taking on far more systematic risk than its models suggest, leaving it vulnerable during market-wide stress events.

Furthermore, inaccurate valuations can also undermine intergenerational equity, creating winners and losers among different cohorts of plan members. This is particularly problematic for schemes that permit lump-sum payouts at retirement or transfer values for members leaving the plan. If a member retires and receives a lump-sum payment when unlisted assets are overvalued, they effectively extract more than their fair share of the plan's assets. This withdrawal at an inflated price crystallises a loss for the remaining members, who are left in an underfunded scheme with assets that will eventually be marked down to their true economic value.

Phalippou (2020) has been critical of the fee structures and valuation practices in private equity, highlighting how they can benefit insiders at the expense of ultimate asset owners, such as pensioners. In a DB context, this dynamic translates into a wealth transfer from younger and future members to departing ones, undermining the collective nature of the pension promise and threatening the long-term sustainability of the plan.

Finally, beyond its financial implications, valuation accuracy also carries profound governance and fiduciary significance. Trustees and sponsors depend on reported valuations to determine contribution policies, risk budgets, and investment mandates, while regulators and beneficiaries rely on them to assess the financial integrity of the fund. Inaccurate or delayed valuations erode transparency and can mask the true cost of benefit promises, weakening confidence in governance structures.

Trustees and fiduciaries have a fundamental duty to ensure that all scheme assets, including illiquid and hard-to-value holdings, are properly appraised and fairly represented in financial statements. International accounting frameworks, specifically IFRS 13 *Fair Value Measurement* and its U.S. counterpart ASC 820 *Fair Value Measurement, require that assets be valued at fair value, defined as "the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date*" (IASB, 2011; FASB, 2011). These standards establish a hierarchy of inputs and place particular emphasis on independent, market-based evidence where available. For assets lacking observable market prices, they require enhanced disclosure and rigorous governance to ensure the reliability of valuation inputs.

Within the context of occupational pensions, fiduciary responsibility extends beyond compliance with accounting standards to encompass active oversight of valuation processes. Guidance from The Pensions Regulator in the UK stipulates that trustees retain ultimate accountability for the governance of investment activities, including the monitoring and review of valuation methodologies used for scheme assets (The Pensions Regulator, 2024). Delegating valuation tasks to asset managers or external parties does not absolve trustees of this duty; rather, trustees are expected to challenge, verify, and document the bases of valuation judgments to ensure that reported figures are fair, prudent, and reliable representations of the scheme's financial position (The Pensions Regulator, 2021).

Institutional Consequences

Insurance Companies

While both defined-contribution and defined-benefit pension funds face valuation challenges that affect member equity and long-term solvency, insurance companies encounter a related but distinct set of valuation risks. For insurers, the valuation of unlisted or illiquid assets is not merely an accounting convention but forms a core component of prudential supervision, capital adequacy assessment, and financial stability. Under risk-based capital regimes such as Solvency II in the European Union and the *Risk-Based Capital (RBC)* framework in the United States, insurers must measure assets and liabilities at fair value, ensuring that reported solvency positions reflect economic reality ((EIOPA 2015); (IAIS 2023)).

Solvency II explicitly defines fair value as "the amount for which [an asset] could be exchanged between knowledgeable willing parties in an arm's-length transaction" and requires insurers to maintain robust internal controls and, where necessary, independent verification of valuations (EIOPA, 2015; (EIOPA, 2022). The International Association of Insurance Supervisors (IAIS) similarly emphasises that valuations for solvency purposes must be consistent, reliable, and timely, forming "the basis of the risk-based solvency assessment of insurers" (IAIS, 2023, page 6). Because solvency ratios, capital buffers, and liquidity positions are all derived from these fair-value measures, valuation accuracy directly influences regulatory capital requirements and market confidence – especially for life insurers with significant exposures to unlisted assets.

Accurate and timely valuation is central to the prudential soundness of insurers. A single stale valuation can create a misleading picture of solvency, particularly under risk-based capital frameworks such as Solvency II. In these regimes, asset valuations feed directly into the Solvency Capital Requirement (SCR), the principal measure of an insurer's capacity to absorb losses and maintain resilience. Over-valued assets artificially inflate solvency ratios, delaying supervisory intervention and concealing emerging vulnerabilities. Conversely, undervalued assets compel firms to hold excessive capital, thereby reducing investment efficiency and distorting risk-taking incentives. The IAIS explicitly notes that inaccurate valuations can "overstate or understate the financial condition of an insurer," undermining both prudential oversight and market confidence (IAIS, 2023; EIOPA, 2015).

Valuation accuracy is not only critical for solvency metrics but also for effective liquidity management. A stale or over-optimistic asset valuation can mislead firms about their ability to access liquidity or collateral in stress conditions. For example, during the UK gilt-market turmoil in late 2022, sharp increases in yields forced funded pension and LDI programmes to meet unexpected margin and collateral calls, precipitating fire sales and evaporating market liquidity (Pintor, 2023; Chen and Kemp, 2023). In a broader context, insurers and other large balance-sheet institutions that rely on unlisted or hard-to-liquidate assets may similarly under-estimate their exposure to sudden cash-flow demands, thereby generating a false sense of liquidity resilience.

Valuation accuracy is fundamental to effective ALM. Insurers and pension funds rely on market-consistent valuations to calibrate hedges and manage duration and convexity exposures across the balance sheet. When asset valuations lag market conditions, particularly for illiquid or Level 3 instruments, the correlation between asset and liability movements deteriorates. Liabilities, typically marked to current discount curves, adjust immediately to market shocks, whereas stale asset values

remain static. The result is a balance sheet that appears stable but is exposed to unhedged interest-rate and liquidity risks. Such misalignments undermine both prudential objectives (the preservation of solvency) and strategic goals (yield optimisation and diversification). These issues are recognised in fair-value accounting frameworks such as *IFRS 13* and in prudential valuation guidance under *Solvency II* and *IAIS ICP 14*, as well as in empirical ALM literature (EIOPA, 2015; IAIS, 2023).

Furthermore, out-of-date or incorrect valuations can distort internal models and, in turn, undermine governance and oversight. Boards, trustees and management committees depend on reported valuations and model outputs when making capital-allocation and risk decisions; where inputs are inaccurate or inconsistent, this channel of risk control is weakened and accountability to regulators, shareholders and policyholders is reduced.

If these distortions arise across many institutions, they can aggregate into macro-prudential blind spots and exacerbate business cycles. Divergent valuation methodologies and inconsistent update frequencies across insurers obscure the true distribution of risk in the system. When unlisted assets are collectively overvalued, the sector appears stronger and more liquid than it really is, encouraging additional leverage, risk-taking and credit expansion during upswings. When valuations eventually adjust, the correction can trigger a simultaneous tightening of balance sheets, amplifying the downturn through forced deleveraging, asset sales and reduced new lending. For insurers, the accurate and timely valuation of unlisted assets is not a narrow technical issue but a systemic safeguard. A single mis-valuation can ripple through solvency, liquidity, governance, and macro-stability with each distortion reinforcing the next. Strengthening valuation frameworks through consistent standards, improved data, and technology-enabled monitoring is therefore not merely an exercise in compliance, it is important to ensure the actions of individual institutions don't snowball to systemic risks. Accurate valuation is ultimately the first line of defence in preserving both insurer solvency and the resilience of the financial system as a whole.

Sovereign Wealth Funds

SWFs are among the largest holders of unlisted assets. Given their long-term investment horizons, it may be tempting for some to downplay the importance of frequent, market-relevant valuations. Such an approach would be flawed for several reasons. First, SWFs manage public capital and are accountable to citizens and legislatures; valuation opacity therefore undermines fiscal transparency and governance credibility (Clark, Dixon and Monk, 2013). Second, without timely valuations, internal risk management and portfolio rebalancing decisions rest on outdated data, impairing strategic asset allocation (Megginson, Lopez and Malik, 2021). Third, because SWFs often serve as countercyclical investors, inaccurate valuations can obscure systemic vulnerabilities and impede macroeconomic stabilisation (El Badawi, Soto and Youssef, 2018). We will explore these themes in greater detail below.

For governance and accountability reasons, sovereign wealth funds must ensure that their assets are valued accurately and in a timely manner. As stewards of national wealth, they have a duty to provide transparent and credible reporting that underpins their legitimacy. Regular and reliable valuations of private assets are essential to evaluate performance, judge whether managers are meeting their benchmarks, and identify early signs of underperformance or mismanagement. Although SWFs

invest for the long term, neglecting interim valuations makes it difficult to detect losses promptly or intervene when necessary. In this sense, valuation accuracy is not merely a technical matter but a foundation for managerial accountability and effective oversight.

Accurate and timely accounting for private assets is also essential for sound fiscal policy and for legitimising the commitment of state resources to a sovereign wealth fund. Credible valuations give policymakers a clear picture of the nation's financial capacity. This, in turn, strengthens fiscal discipline and supports prudent decisions on spending, saving, and debt issuance. Just as importantly, transparency in valuations sustains public confidence in how national wealth is managed. When that transparency is lost, confidence erodes, creating space for suspicion and doubt about how assets are being handled. Timely reporting of asset values, even during downturns, demonstrates stewardship and prevents accusations of concealment or mismanagement. In short, timely valuation is the primary tool through which public stewardship of the nation's wealth is demonstrated, measured, and enforced.

At the same time, valuation accuracy is not only a matter of internal governance but also a precondition for sovereign wealth funds (SWFs) to perform their macro-financial function as countercyclical shock absorbers. Stabilisation-oriented SWFs are explicitly designed to smooth fiscal and macroeconomic volatility by accumulating assets in good times and drawing them down in bad times, thereby supporting government budgets and domestic liquidity when adverse shocks occur (El Badawi, Soto and Youssef, 2018; Al-Sadiq, Al-Sadiq and Gutiérrez, 2023)). To act in this way, SWF managers must have confidence in their own balance sheets. Accurate, timely valuations function as a "licence to act", making visible the true scale of existing losses and the amount of capital that can be deployed without breaching fiscal or risk constraints (Bahoo, Alon and Paltrinieri, 2020). When valuations are stale, particularly for illiquid or unlisted assets, funds operate under heightened uncertainty and may delay intervention, undermining their stabilisation role at precisely the moment it is most needed (El Badawi, Soto and Youssef, 2018; Al-Sadiq, Al-Sadiq and Gutiérrez, 2023)).

Moreover, a wider literature on illiquid asset valuation shows that delayed markdowns and smoothed prices can create a collective "valuation illusion" that masks fragility and leads to abrupt corrections once hidden losses are recognised, amplifying rather than dampening volatility (Getmansky, Lo and Makarov, 2004). When large public investors such as SWFs understate losses or lag in valuing unlisted holdings, these dynamics can mislead policymakers and financial markets about the true state of balance sheets. Conversely, credible, market-relevant valuations give SWFs the information needed to act decisively in downturns and send a strong signal of confidence to markets, thereby supporting macro-financial stability and public trust.

In this way, valuation discipline forms the bridge between *micro-level accountability* and *macro-level stability* underscoring that accurate valuation is not just an accounting exercise but a precondition for effective public stewardship and financial resilience.

Valuation Governance and Best Practice

Valuing unlisted assets is difficult because their prices are not directly observable in the market. To ensure that these valuations are consistent and transparent, international accounting standards require them to be measured at fair value. The main frameworks that define fair value are IFRS 13 (by the International Accounting Standards Board), ASC 820 (by the U.S. Financial Accounting Standards Board), and the International Private Equity and Venture Capital Valuation Guidelines (IPEV, 2022).

All three define fair value in similar terms: it is the price that would be received to sell an asset, or paid to transfer a liability, in an orderly transaction between market participants on the measurement date. IFRS 13 and ASC 820 provide the general principles and hierarchy of inputs, while IPEV (2022) offers more detailed guidance for valuing private market investments such as private equity, venture capital, and infrastructure. A key point in the IPEV (2022) guidelines is that valuations should reflect the perspective of market participants, not just the current investor, and should capture current market conditions. The guidelines also describe three main methods for estimating fair value:

1. Price of recent investment, used only when an asset was acquired recently;
2. Market comparables, based on valuation multiples from similar companies or transactions; and
3. Discounted Cash Flow (DCF), also called the income approach, which values assets using expected future cash flows.

Each of these methods requires professional judgment and careful use of inputs. Rather than focusing on how these methods work, this section discusses best practices for selecting and applying valuation inputs. Following these practices, covering areas such as economic substance, transparency, timeliness, methodological soundness, market consistency, independence, and purpose alignment can improve the accuracy, reliability, and credibility of fair value estimates, benefiting investors, managers, and regulators alike.

The IPEV (2022) guidelines outline three main approaches to estimating fair value for unlisted investments: the price of recent investment, the market approach, and the income approach. The choice of method depends on the nature of the asset, the availability of market data, and the reliability of inputs. In practice, valuers often use more than one method to cross-check results and strengthen confidence in the final valuation.

The price of recent investment approach is generally used only for assets acquired recently in an arm's-length transaction. This method assumes that the purchase price reflects current fair value, provided there has been no significant change in market or company conditions since the acquisition. Over time, as conditions change, this method becomes less reliable and should be replaced with another approach.

The market approach determines value by comparing the asset with similar companies, transactions, or industry benchmarks. It often uses valuation multiples such as enterprise value-to-EBITDA or price-to-earnings ratios. The main advantage of this approach is that it reflects real market data, but its reliability depends on how truly comparable the chosen benchmarks are. For niche or illiquid sectors, such as infrastructure or venture capital, finding suitable comparables can be difficult.

The income approach, often implemented through a DCF model, estimates value based on expected future cash flows and an appropriate discount rate. This method is widely used because it captures the specific characteristics and performance expectations of the asset. However, it also relies heavily on assumptions about growth, risk, and exit values, making transparency and consistency critical. IPEV (2022) encourages valuers to apply professional judgment and document the reasoning behind their choice of method. It also recommends using multiple approaches where possible to cross-validate results. This improves the credibility of valuations and ensures they better reflect the perspective of market participants.

The next section builds on this foundation by outlining best practices for valuation inputs. These principles, covering aspects such as transparency, independence, and market consistency, help ensure that fair value estimates are not only technically sound but also trusted by investors, auditors, and regulators.

Best Practice Dimensions for Valuation Inputs

Sound valuation depends not only on choosing an appropriate method but also on using reliable, well-governed inputs. The following dimensions represent recognised best practices that strengthen the quality, transparency, and credibility of fair-value estimates for unlisted assets. In Table 2, five governance dimensions are described with their underlying core principles and the outcomes they drive for stakeholders. These dimensions are explored in further detail below.

Table 2

Governance Dimension	Core Principle	Illustrative Outcome
Economic Substance	Capture true economic exposure	Prevents contractual distortion
Transparency & Independence	Full audit trails and third-party challenge	Builds trust and credibility
Timeliness & Market Consistency	Reflect current market data	Avoids smoothing and lag bias
Methodological Soundness	Consistent and evidence-based models	Ensures comparability and reliability
Purpose Alignment	Fit-for-purpose valuation intensity	Balances cost, complexity, and decision-usefulness

Economic Substance

As the first of the governance dimensions, economic substance is the most important. Valuations should reflect the real economic position of the asset rather than its accounting or contractual form. For example, infrastructure projects often sit within layered ownership structures or long-term concession agreements. Focusing on economic substance means capturing the genuine risk and reward profile this means ensuring future cash flows, demand risk, regulatory exposure are included in the valuations, rather than the surface structure of the entity. This principle helps ensure that the resulting value represents how informed market participants would actually price the asset.

Transparency

Every key assumption in a valuation, discount rates, growth forecasts, exit multiples, should be clearly documented and explained. Transparency allows stakeholders such as investors, auditors, regulators

and other stakeholders to understand and test the reasoning behind a valuation. In practice, this involves keeping a full audit trail, performing sensitivity analysis, and making clear which inputs are observable and which rely on judgment. Transparent processes build confidence and reduce the perception of bias or opportunism.

Timeliness

Valuations must reflect current market conditions. Private assets are often revalued quarterly or semi-annually, but market environments can change rapidly. Updating valuations promptly after significant events, such as changes in interest rates, regulation, or market sentiment, ensures that reported figures remain relevant and decision useful.

Employing up-to-date estimates for the cost of capital, discount rates, and other key assumptions is essential. Valuers should avoid smoothing inputs across periods or relying on outdated benchmarks, as this can mask volatility and delay the recognition of material changes in value. As the IPEV (2022) guidelines emphasise, valuations should represent the price that a willing buyer would pay for an investment at the measurement date, not an average or historical estimate.

Timely valuations support effective portfolio management, performance measurement, and risk oversight. For investors and supervisors alike, they provide a clearer view of exposure to market shifts and enable faster, more informed responses to emerging risks. By ensuring that fair value reflects real-time conditions, timeliness strengthens both the accuracy and credibility of the valuation process.

Methodological Soundness

The chosen valuation method should be appropriate for the specific asset type and applied consistently over time. Methodological soundness requires disciplined model design, clear documentation, internal review, and periodic calibration against observable market evidence such as recent transaction prices or comparable company data. Consistency in method selection and parameter use allows valuations to remain comparable and credible across reporting periods.

Applying methods selectively or altering assumptions to achieve preferred outcomes undermines both reliability and trust in the valuation process. As emphasised by IPEV (2022), valuers should cross-check results using more than one approach wherever possible to confirm reasonableness and identify outliers. Such cross-validation strengthens confidence that the valuation reflects genuine market participant perspectives rather than model artefacts or managerial discretion.

Market Consistency

Fair value should be anchored to information that reflects actual market behaviour. Where direct market prices are unavailable, valuers should benchmark their assumptions against observable data such as comparable transactions, quoted bond yields, or market multiples for similar businesses. Regular back-testing against realised exit prices helps prevent valuation drift and highlights whether models remain aligned with market evidence.

Practices such as arbitrarily adding risk premia, like an "illiquidity premium", to justify higher discount rates or subjective valuations create the illusion of precision while detaching estimates from genuine market pricing. These adjustments often serve to rationalise desired outcomes rather than reflect what informed market participants would actually pay for an asset. Fair value must be grounded in evidence, not opinion.

Similarly, employing broad averages of prices, interest rates, or methodologies that fail to capture prevailing market practice weakens the link between valuation models and real transaction behaviour. The goal of fair value is not to smooth volatility or engineer stability, but to measure value as it would be exchanged in current, observable market conditions. Ensuring this market consistency preserves both the credibility and comparability of valuations across time and portfolios.

Independence

Valuations must be prepared free from conflicts of interest and undue influence. Independence in both process and oversight is essential to preserve integrity and credibility. When portfolio managers or investment teams are directly involved in valuing their own assets, there is a natural risk of optimism or bias, particularly where performance fees, bonuses, or fundraising outcomes depend on reported values.

Establishing independent valuation committees, engaging external appraisers, and implementing strong internal controls are key safeguards. These mechanisms separate valuation decisions from commercial incentives and provide objective challenge to underlying assumptions. Empirical research has shown that independent oversight reduces systematic upward bias in private market valuations and enhances investor confidence.

(IPEV 2022) and other leading standards emphasise the importance of a transparent governance structure that ensures independence at every stage of the process, from data collection to final approval. By maintaining this separation, valuers help ensure that reported fair values represent genuine market-based estimates rather than internal preferences or strategic positioning.

Purpose Alignment

Valuations should always be fit for their intended purpose. The level of detail, precision, and disclosure required depends on whether the valuation is used for financial reporting, regulatory compliance, performance measurement, or transaction negotiation. Aligning the scope and depth of the analysis with its purpose ensures that valuations are both efficient and meaningful.

A fair value estimate used for quarterly reporting, for example, may rely on updated assumptions within an established model, whereas a valuation prepared for a potential sale or capital raising will require deeper market testing and scenario analysis. Applying the same level of complexity to all situations can be inefficient and may obscure rather than clarify results.

Purpose alignment also helps ensure fairness and proportionality. It prevents valuations from being overstated through excessive modelling or understated through oversimplification. By tailoring the process to its objective, valuers can deliver information that is transparent, relevant, and useful to

decision-makers while maintaining consistency with the overarching fair value framework set out in (IPEV 2022) and IFRS 13.

Integrating the Dimensions

These principles reinforce one another. Transparency and independence increase trust; timeliness and market consistency improve accuracy; methodological soundness and purpose alignment ensure relevance. Together they form a governance framework that turns fair value from a technical exercise into a broader system of accountability. Applying these best practices enhances valuation quality, protects investors, and strengthens the credibility of private market reporting.

Valuation Quality and Stakeholder Outcomes

Valuations of unlisted assets depend on more than technical accuracy; they reflect how governance, professional judgment, and market discipline interact. The seven best-practice dimensions outlined earlier form a system of valuation governance rather than a checklist of procedures. When applied together, these principles ensure that fair-value estimates communicate meaningful, credible information to investors and regulators.

Implementation and Oversight

Ensuring that valuation processes are not only well designed but also effectively governed requires strong institutional mechanisms. The credibility of fair-value reporting depends as much on how valuations are implemented, reviewed, and challenged as on the technical models themselves. Across jurisdictions, regulators increasingly view valuation oversight as a matter of prudential governance, not administrative procedure.

Independent Valuation Committees

A cornerstone of effective oversight is structural independence. Many institutional investors, particularly pension funds and insurers, have established independent valuation committees (IVCs) that operate separately from portfolio management teams. Their mandate is to review methodologies, challenge key assumptions, and approve valuation outcomes before they are reported. By separating those responsible for investment performance from those verifying asset values, IVCs reduce the risk of optimism bias and strengthen confidence among boards, auditors, and regulators.

For example, under *Prudential Standard SPS 530 – Investment Governance (2023)*, APRA requires superannuation trustees to maintain documented valuation policies approved by the board and supported by an independent oversight function. The accompanying Prudential Practice Guide SPG 530 clarifies that APRA expects valuation oversight functions to be operationally independent from investment decision-making and that Boards should review and challenge key investment reports and ensure that valuation frequency and interim valuation triggers reflect prevailing market conditions and periods of elevated volatility

Periodic Back-Testing and Model Validation

Robust implementation of valuation frameworks depends not only on initial model design but also on the ongoing validation of valuation accuracy. Best practice in both prudential and market-risk

literature emphasises systematic back-testing, that is, comparing past valuations with subsequent transaction prices or observable market benchmarks, in order to assess the reliability of underlying methods, assumptions and data inputs. Persistent, unexplained deviations between model valuations and realised prices are indicative of potential model drift, bias or mis-specification and should trigger a review of the valuation governance framework, including escalation to senior management and the board. Within the Solvency II regime, these principles are embedded in binding requirements on internal control of valuations. The Solvency II Delegated Regulation (EU) 2015/35 obliges insurance and reinsurance undertakings to provide sufficient resources to develop, calibrate, approve and review the valuation approaches used for solvency purposes and to establish internal control processes that include independent review and regular verification of the data, assumptions and results of those valuation approaches (EIOPA, 2015). These processes must be subject to oversight by the persons who effectively run the undertaking, including procedures for taking account of external, independent valuations of material assets and liabilities.

Regulatory Reporting and Disclosure Templates

Transparent oversight also requires consistent external reporting. Under Solvency II, insurers must submit standardised Quantitative Reporting Templates (QRTs) that, among other things, provide detailed breakdowns of assets and liabilities (including alternative/illiquid assets) and support supervisors' comparison of valuations across firms. Similarly, APRA's Superannuation Data Transformation project is enhancing the granularity of superannuation fund investment and valuation-related data, with draft reporting standards covering investments, valuations and exposure (including illiquid assets). These reporting frameworks assist regulators in comparing entities, identifying valuation-governance gaps and monitoring potential pricing or liquidity risks in the system.

In the private-equity domain, ILPA's Principles 3.0 (see ILPA, 2019) recommend that GPs enhance transparency by providing more frequent (e.g., quarterly) disclosure of portfolio-company valuation information. Specifically, ILPA encourages GPs to include in their reporting clear information on the calculation of valuations and to share written policies with LPs. While the document does not set a detailed checklist, this enhanced reporting framework is intended to promote comparability across funds and reduce opportunities for value-smoothing

Toward a Culture of Valuation Accountability

Taken together, these mechanisms transform valuation from a periodic exercise into an ongoing governance process. Independent committees provide challenge; back-testing supplies empirical discipline; and regulatory reporting embeds transparency. When implemented jointly, they ensure that valuations evolve as a *living system of accountability*, responsive to markets, resilient to conflicts of interest, and auditable by both investors and supervisors.

Policy and Research Implications

The preceding discussion demonstrates that valuations are not a narrow technicality but a cornerstone of market governance. Yet, current practice and regulation still treat interim valuation as a reporting exercise rather than as a mechanism of fiduciary control. To ensure the stability and legitimacy of private markets, regulators and standard-setters must reframe valuation frequency as a governance requirement, akin to capital adequacy or risk-management oversight, rather than a discretionary disclosure.

Regulatory Re-Anchoring

Most regulatory frameworks, such as IFRS 13, ASC 820, and the IPEV Guidelines define what fair value represents but not *how* it should be determined in practice. They provide a conceptual hierarchy of inputs and outline acceptable valuation techniques, yet leave wide latitude in how those inputs are selected, weighted, and updated over time. This flexibility was originally intended to accommodate asset heterogeneity, but in practice it has produced an expansive zone of discretion.

Different managers, auditors, and jurisdictions interpret "market participant assumptions" in completely different ways. Some emphasise discounted-cash-flow models using internal projections; others rely on stale transaction multiples; few disclose the sensitivity of results to unobservable parameters. As a result, "fair value" under current standards is as much a governance choice as an accounting outcome.

Crucially, these frameworks specify how to measure fair value at a point in time but do not prescribe how frequently such measures should be updated or validated. This absence means that valuation cycles vary from monthly to annually, even for comparable asset classes. This inconsistency undermines comparability and allows prolonged periods during which values reflect managerial judgment more than market reality.

Supervisors should therefore move beyond conceptual guidance toward procedural discipline. Minimum expectations should address both valuation frequency and input governance, including rules for updating discount rates, market-multiple benchmarks, and cash-flow assumptions when market conditions change materially. Event-triggered re-marking after observable shifts in interest rates, credit spreads, or transaction evidence would bring Level 3 assets into closer alignment with the continuous-valuation principles applied to listed instruments.

In short, the challenge is not that the standards fail to define fair value, but that they define it too abstractly, allowing discretion to substitute for discipline. Without stronger procedural requirements the promise of fair value remains theoretical, and opacity persists under the guise of compliance.

Convergence and Cross-Jurisdictional Consistency

A coordinated approach between the Financial Stability Board (FSB), IOSCO, EIOPA, and national prudential regulators would help avoid fragmented practices that permit regulatory arbitrage. The experience of Solvency II in Europe, which mandates quarterly solvency calculations and fair-value balance-sheet updates, demonstrates the feasibility of such cadence without overburdening firms. Similarly, APRA's reforms in Australia and SEC proposals in the US have already recognised that stale

valuations compromise both investor protection and systemic visibility. Collectively, these frameworks could evolve into a "Global Valuation Discipline Code", an equivalent to Basel's treatment of capital adequacy, anchoring fair value not merely in accounting guidance but in prudential norms.

Supervisory Transparency

Finally, frequency must be coupled with visibility. Periodic submission of valuation-methodology summaries and independent-review attestations to supervisors would allow early detection of divergence between reported and realised values. Such a reporting discipline would shift the supervisory model from post-hoc audit to continuous risk monitoring, enhancing confidence in the resilience of the private-asset system.

Data and Technology

The historical argument against frequent valuations, that they are costly, subjective, and data-limited, no longer holds. Advances in data science and information infrastructure are redefining what is technically and economically feasible.

Machine-Learning Appraisal and Benchmark Integration

Machine-learning (ML) techniques can augment, rather than replace, professional judgment by systematically extracting signals from observable market proxies such as secondary transactions, listed comparables, credit spreads, or macroeconomic indicators. When calibrated and governed properly, these models can generate interim "shadow marks" that allow boards and auditors to identify whether a fund's reported values deviate materially from model-implied ranges.

Transaction Databases and Data Pooling

The creation of centralised transaction databases, similar to TRACE in fixed-income markets, would further support valuation integrity. Data-pooling initiatives by the ILPA, IPEV Board, and OECD Infrastructure Data Initiative already point toward greater transparency in private-market pricing. Regulators could incentivise participation through safe-harbour provisions, allowing anonymised trade data to be shared without breaching confidentiality.

Research Frontiers

For academics, the convergence of text-based disclosures, transaction data, and ML models opens new frontiers for valuation-forecast validation and bias detection. Empirical research can quantify how valuation lag affects systemic volatility, asset-allocation decisions, and pro-cyclicality, this will inform both prudential policy and performance attribution in illiquid markets.

Cultural and Fiduciary Reform

Beyond technical reform lies a cultural challenge. Within parts of the private-asset ecosystem, valuation remains an act of reassurance rather than of discipline, a ritual confirming stability rather than probing risk. This mindset is deeply rooted in the industry's long-term investment narrative, which often conflates patient capital with opaque reporting.

Policy and Research Implications

Reducing the Comfort with Smoothing

Many practitioners view valuation smoothing as benign, assuming that short-term noise obscures long-term truth. In reality, smoothing postpones truth and concentrates risk. Industry education and governance codes must explicitly address the behavioural incentives that promote under-reaction, whether fee structures tied to reported NAVs, internal performance targets, or political pressure to avoid volatility in sovereign funds. Embedding valuation-challenge sessions within quarterly board reviews, where internal valuers defend their assumptions to independent committees can normalise challenge as a professional expectation rather than as a criticism.

Fostering Transparency as a Virtue

Finally, transparency should be reframed as a sign of maturity, not weakness. When funds openly acknowledge volatility, they demonstrate competence in managing it. Public investors, regulators, and beneficiaries increasingly reward candour; opacity, by contrast, now signals fragility. The cultural pivot from "valuations as stability theatre" to "valuations as governance discipline" is therefore both ethical and strategic.

Conclusion

The preceding analysis demonstrates that valuation frequency is not a technical refinement but a structural condition for credible market governance. Private markets today operate under rules that define fair value conceptually but regulate it procedurally only in name. IFRS 13, ASC 820, and IPEV each set out what fair value is, yet none specifies how it should be implemented, updated, or challenged. This absence of procedural discipline has created a regime in which compliance is easy, comparability is low, and discretion is pervasive.

The solution is not another layer of guidance but a change in regulatory posture. Fair-value measurement must evolve from a principles-based aspiration to a standards-based discipline the clear minimum expectations on valuation frequency, event-triggered re-marking, and governance of key inputs. Regulators should treat valuation cadence and inputs as they treat capital adequacy, central to prudential oversight, not peripheral to disclosure. Without such anchoring, "fair value" remains theoretical, its credibility dependent on voluntary interpretation rather than enforceable norms.

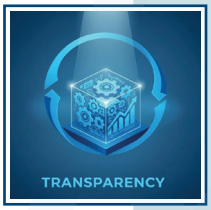
Technology now removes the old excuses for infrequency. Machine-learning models, transaction databases, and benchmark integration make continuous valuation feasible at scale and cost. The constraint is no longer data, it is the willingness to do so. What remains is a cultural reform, shifting from "valuation as reassurance" to "valuation as discipline." Transparency must be understood as competence, not vulnerability; smoothing must be recognised as concealment, not prudence. A credible valuation regime, grounded in procedural clarity and technological capability, is indispensable to investor fairness, systemic resilience, and the legitimacy of private markets.

Appendix – Valuation Inputs & Accuracy – Governance Checklist

Do valuations reflect how the asset actually works and earns money in the real world, not just what's on paper?

> Does the valuation reflect the economic reality of the asset, not just its legal or accounting form?
> Have you captured future cash flows realistically, including timing and probability?
> Have you properly assessed demand risk (e.g., volume, price, utilisation)?
> Have you incorporated regulatory and political risk (e.g., concessions, tariffs, contract renewals)?
> For layered ownership / concession structures, have you correctly identified who actually bears the risks and receives the rewards?
> Would an informed market participant recognise this valuation as consistent with how the asset is actually traded or priced?

Is it clear what assumptions and data were used and how you derived your final number from these?



> Are all key inputs and assumptions (discount rates, growth rates, exit multiples, cash-flow forecasts) clearly documented?
> Is there a traceable audit trail from raw data to final valuation output (including versions and overrides)?
> Have you performed and documented sensitivity analyses on the main value drivers?
> Have you clearly distinguished which inputs are observable (market-based) and which are judgmental (model-based)?
> Can investors, auditors and regulators reconstruct and challenge the valuation if needed?

Is data on current market conditions and valuations updated often enough to reflect what's happening right now?

> Does the valuation reflect current market conditions as of the measurement date (not an average over time)?
> Are valuations updated at an appropriate frequency (e.g. quarterly) given the asset's risk profile and market volatility?
> Are there defined triggers for out-of-cycle revaluations (e.g. rate shocks, regulatory changes, rating actions, major transactions)?
> Have you updated discount rates, risk premia and cash-flow assumptions using the latest available data, not stale benchmarks?
> Do valuations align with the IPEV/IFRS 13 principle of "price that a willing buyer would pay at the measurement date", rather than smoothed or historical estimates?

Appendix – Valuation Inputs & Accuracy – Governance Checklist

Are you using the right valuation approach for this type of asset, applying it consistently, and checking your work against real market evidence?

> Is the chosen valuation approach (DCF, market multiples, transaction comparables, etc.) appropriate for this asset's risk profile and data availability?
> Is the method applied consistently over time, with changes clearly justified and documented?
> Have you calibrated the model against observable evidence (recent transactions, secondary market trades, comparable companies)?
> Have you cross-checked results using at least one alternative method where possible (e.g. DCF vs multiples)?
> Are model structures, parameters and overrides subject to internal review and approval (not just individual discretion)?

Are your assumptions based on actual current market data rather than outdated benchmarks or guesswork?

> Are key inputs (yields, discount rates, growth expectations, multiples) anchored to current market data rather than arbitrary rules of thumb?
> Have you benchmarked assumptions against comparable transactions, traded bonds, listed peers or indices?
> Have you conducted back-testing of past valuations versus actual exit prices or subsequent market evidence?
> Are any illiquidity premia or adjustments explicitly justified, quantifiable and grounded in evidence (not used to rationalise a desired value)?
> Have you avoided excessive reliance on broad averages that obscure segment-specific market conditions?

Is the valuation process separated from conflicts of interest, with independent reviewers who can challenge assumptions without career risk?

> Are valuation decisions separated from commercial incentives (carry, bonuses, fundraising, deal origination)?
> Is there an independent review function (valuation committee, risk, or external appraiser) that can challenge assumptions?
> Are conflicts of interest (e.g. managers valuing their own portfolios) identified and mitigated by process (dual sign-off, independent calibration)?
> Are valuation policies and governance arrangements documented and approved at board/committee level?
> Is independence visible to external stakeholders (LPs, regulators, auditors) in terms of clear roles and responsibilities?

Appendix – Valuation Inputs & Accuracy – Governance Checklist

Is the level of detail and rigor in your valuation process, and its adherence industry standards and requirements, appropriate for how it will be used?

> Is the scope and depth of the valuation appropriate for its purpose (financial reporting, regulatory capital, performance measurement, transaction pricing)?

> For routine reporting, are you using a proportionate update of established models rather than over-engineered structures?

> For transactions, capital raising or strategic decisions, have you undertaken deeper market sounding and scenario analysis?

> Are disclosure levels aligned with user needs (e.g. more granular for LPs and regulators, concise for board-level reporting)?

> Does the valuation remain consistent with IFRS 13 / IPEV fair value principles even as you tailor detail to the use-case?

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