Institute and Faculty of Actuaries

Private Assets Valuation Oversight

Key considerations when designing and implementing a valuation oversight framework for private assets

by Leslie Uzan*, Ebenezer Ikediashi, Clare Keeffe, Kevin McLaughlin and Daljit Singh.

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Abstract

This paper discusses the growing need for closer oversight of private asset valuations, as part of a broader monitoring framework. The paper explores the main types of valuation methodologies which are relevant to private assets, and discusses the regulatory responsibilities on asset owners and key stakeholders. The paper then outlines some recommendations in terms of governance and implementation of a robust valuation monitoring framework.

Keywords

Private assets; Valuation; Pricing; Governance; Monitoring; Uncertainty

*Correspondence to: Leslie Uzan, C/O IFoA, 7th Floor, Holborn Gate, 326-330 High Holborn, London, WC1V 7PP, UK. E-mail: Professional.communities@actuaries.org.uk

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1. Introduction: the growing need for valuation monitoring

There has been a growing trend for institutions, including insurance companies and pension funds, to invest in private assets, with many increasing their allocations to alternative asset classes over the past decade. Private markets are estimated to be close to $10tr, of which over half is in the US and a quarter in Europe followed by rest of the world (BIS Quarterly Review, December 2021, The rise of private markets, Aramonte, Avalos). The growing size of private market allocations brings risk management considerations and requires institutional investors and supervisory bodies to continue to evolve their asset oversight and monitoring frameworks.

While most asset owners may already have well-established processes for the monitoring of private asset portfolios, one area which has received less attention is the uncertainty associated with the underlying valuation and how this component of risk may be incorporated into an effective monitoring approach. Valuation uncertainty relates to the timeliness, quality and accuracy of the method(s) and inputs used to place a fair market value on privately-held assets, in the absence of a traded market price. Confidence in valuation estimates is critical for asset owners. For liability owners and regulatory oversight bodies it is also important to understand sources of uncertainty and how this affects solvency and the strengths of reserves.

The goal of this paper is to provide further context on this issue and suggest a monitoring framework which can be carried out to give greater comfort around the valuation of private assets. We do this by, first, providing a brief overview of common valuation methodologies utilised for various sub-asset classes within private markets. Secondly, we discuss regulatory responsibilities and potential best-practices for asset owners and managers. Thirdly, we discuss the key components of an effective valuation monitoring framework. Lastly, we provide some brief conclusions and some sources of further reading.

Private markets are experiencing significant growth, such as increased investment into infrastructure and other developments in liquidity and trading platforms for private assets e.g. secondary markets. As such, the scope of paper does not cover all areas of the market and all developments potentially relevant to the topic of valuation uncertainty. This paper is aimed broadly at those with an interest or involved in the monitoring and oversight of private asset valuation and other relevant stakeholders. It is therefore high level in nature and does not attempt to make formal recommendations. Rather, our intent is to provide some guidance around important areas to focus on. It is left up to the individuals and their firms to establish what is the most effective approach for their own portfolios and institutions, and understand limitations associated with the chosen approach.

2. Overview of Valuation Methodologies in Private Markets

Valuation of private assets is subject to a degree of uncertainty, as there are no observable, traded market price. This is because private assets are, by definition, not listed on any exchange with active "price discovery". Additionally, the underlying asset may trade only relatively infrequently, and among a small range of sophisticated buyers and sellers. Therefore, alternative way are sought to determine the "fair value" via indirect methods and will often require reliance on financial methods, data and assumptions.

Table 1 lists some of the most common indirect methods; "Comparator method", "Discounted cash flow (DCF) method" and "Replacement cost". As each private asset can be unique in nature, there will be no perfect method to capture the 'correct' valuation and other more appropriate methods may exist to those listed in the table below, or will be variations of these. As a result, institutions typically rely on the ongoing professional judgement of internal or external 3rd party valuation experts to determine the most appropriate valuation method. However firms who outsource valuation and monitoring are still obliged to understand limitations and caveats placed on the valuation.

The most appropriate valuation method also needs to be kept under review. This is because private markets are undergoing rapid growth with new liquidity and trading platforms, the emergence of other proxy valuation methods and alternative data sources. As a result, firms using a particular valuation method e.g. replacement cost or DCF, may find that a different approach becomes viable and that this may represent a more robust approach to fair valuation.

Valuations may also consider pricing points in secondary markets, which could be more liquid and dynamic. In practice, there are broadly three key valuation methodologies that may be used by professional valuation experts, in isolation or in combination, to value private assets. Each approach will have benefits and limitations, some of the limitations are noted below:

Table 1. Main valuation methodologies for private assets

Method	Description	Limitation
Comparator Method also referred to as "reference value"	A fair value price is obtained by reference to: • a publicly listed asset with similar cash flow timing, amount, and risk characteristics e.g. private loans and/or • similar precedent market transactions e.g. private equity, real assets, etc.	A key limitation of this approach is that such a comparable asset or precedent transaction may not be readily identifiable. Even if a comparable asset valuation is available, the valuation may not be current and may require other material expert valuation adjustments that are not based on observable prices.
Discounted Cash Flows – also referred to as the "intrinsic" or "income" method.	This approach seeks to determine a net present value by determining the expected net cash flows over the life of the asset, or until arriving at a terminal value, and discounting these cash flows at an appropriate risk-adjusted rate.	A key limitation of this approach is that the cash flows and/or terminal value of some assets may be difficult to estimate and/or subject to a range of plausible estimates. There may also be uncertainty or a range of plausible approaches in selecting the appropriate discount rate and allowance for illiquidity premium.

Replacement cost method	This approach involves placing a value on the cost of replacing the private asset or by replicating its expected cash flows.	Typically, this approach may be used if there is no comparable valuation available and/or a discounted cash flow method is difficult to perform.

The valuations methods above typically utilise some form of financial model. These valuations are based on methodology, assumptions and data. In most cases, choices made may depend on the expert judgement and experience of the professional assessor and will therefore have an element of subjectivity and sources of valuation uncertainty. This can include the choice of the method itself, the quality, timeliness and accuracy of the data and the required assumptions. The degree of subjectivity involved may also depend on the nature of the private asset and/or the complexity or uniqueness of its structure and key features. The range would, for example, be expected to be small where the private asset has relatively common features, and hence it is easier to find comparators or to estimate its projected cash flows, and vice versa.

Investors holding private assets in pooled funds or Fund of Funds should be aware of the valuation approach adopted by the fund administrator. Valuation approaches do not significantly differ from those set out in this paper, which focuses on single asset, but investors should be aware of possible volatility in valuations depending on the methodology adopted, as well as likely lags in valuations given the complexity of valuation and availability of data points. Investors should appropriately challenge unexplained material deviations in valuation from one reporting point to the next to ensure methodology is understood.

Fees are an integral part of valuations when considering net of fee asset values, and whilst the range of fee structures is out of scope of the paper, the reader should be mindful of their existence and potential impact.

3. Regulatory Responsibilities and Best Practices for Valuation

The valuation of assets touches many governance, strategic and operational aspects of insurance companies and pension funds. As a result, there is an extensive range of regulatory guidance, actuarial, accounting and auditing standards which are potentially relevant to the topic of valuation uncertainty for private assets. Our goal is therefore not to attempt to provide a full inventory of potential responsibilities and requirements associated with actuaries and other stakeholders involved in asset valuation, but rather we seek to comment on the more salient aspects of governance which are applicable to a monitoring framework for private assets.

Relevant standards include, for example, understanding the need to follow “fair value” principles for regulatory and financial reporting. For purposes of international financial reporting, International Financial Reporting Standard 13 (IFRS 13) defines “fair value” of assets 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’. Another key standard to adopt is the PRA Prudent Person Principle, which emphasises the importance of understanding the assets purchased and valuation uncertainty.

Some of the relevant quotes from the Prudent Person Principle are noted below:

“in relation to the alternative valuation methods referred to in Article 10(3) of the Delegated Regulation … the PRA will consider whether the firm has credibly justified the alternative valuation approach used.”

“The PRA expects that the more material the firm’s exposure, the greater the skills and expertise that will be required of the persons involved in the valuation of these assets.”

“The PRA expects that firms will have effective systems and controls in place to limit and manage their exposure to valuation uncertainty. This should include a framework for quantifying or grading their exposure to this risk, to enable them to define appropriate internal investment limits … in respect of their investment in assets that expose them to valuation uncertainty.”

4. Governance of the Valuation Monitoring Framework

Notwithstanding any regulatory and other requirements, best practice is to have a robust governance process and implementation framework for monitoring and challenging the valuation of private assets. The purpose of this section is therefore to put forward a set of processes and framework considerations that could be adopted by institutional investors in order to enhance the approach to the valuation and monitoring of private assets. There are seven subsections which breakdown the process and framework into greater detail

Governance process

As a starting point, we believe it can be helpful to have a dedicated forum or formal committee of appropriately skilled experts who can convene, as and when appropriate, to address various aspects of valuation uncertainty as part of a wider valuation remit. This forum or committee can have a formal or informal remit to:

- set out the firm’s policy on all aspects of valuation uncertainty and monitoring of private markets;
- clarify thresholds for materiality and other principles e.g. proportionality;
- establish a process to deal with valuation challenges and issues as they arise and to permit internal challenge of the valuation process, assumptions and valuations;
- implement a review process to identify any potential for bias in the valuation process; and
- as appropriate, to formally monitor public and private markets and identify significant market or asset class specific events that may impact portfolio pricing e.g. volatility/liquidity conditions.

Policy implementation and oversight

This considers where the formal responsibility is for the implementation of the governance and oversight approach, including consideration of issues such as:

- how the committee is integrated into the overall company risk governance framework;
- what is the structure and mandate of the committee and who should be the appropriate (named) individuals responsible for the oversight;
- whether various oversight tasks are undertaken in-house or externally; and
- setting policy and standards on conduct, including for example, documentation and minuting of meetings, quorums etc.

Some firms may already have an established Valuation Committee, in which case this could be an ideal home for the private asset valuation monitoring oversight. If not, then reporting to the Investment Committee or Operations Committee may be a suitable governance path.

There should also be appropriate governance around the oversight policy itself. A relevant committee or individual should be named responsible for reviewing and updating the policy on a regular basis.

Understanding and mitigating potential for bias or conflicts of interest

As part of its regulatory responsibility, the committee will want to review the knowledge and expertise of the valuation agent and to form an understanding of the key elements of their valuation process. Additionally, with respect to valuation monitoring, it would be important for the committee to develop an understanding of any valuation bias (implicit or explicit) and/or to determine if the valuation agent may have potential or actual conflicts of interest (the latter is important where valuations are carried out in-house). This understanding could potentially extend to a review of the methodologies used by agencies for the purposes of credit rating and valuing private fixed income assets.

For good governance purposes it would be best practice for the valuation agent to be independent (of the firm and/or the manager of the assets if outsourced to a third party) while the monitoring process should be isolated from other duties with separate reporting lines to those of the portfolio management or outsourced fund manager. For credit rating purposes, it would be preferable to have more than one firm providing a rating into the valuation process. If this is not possible, then further scrutiny may be warranted.

Escalation process

Escalation covers the process of communicating defined valuation breaches to relevant stakeholders and seeking remedial action. Severity will consider the size of the breach, the size of the asset and the impact on the portfolio. Any valuation breaches would in the first instance be queried with the valuation provider for investigation.

Once confirmed the breach would be escalated with proposed remedial action. Such action could include:

- The valuation breach is resolved and is adjusted in line with what was requested.
- The valuation breach is unresolved and so an additional valuation is requested (e.g. from an independent party).
- The valuation breach is unresolved, and the valuation provider is changed. This will likely be an option if the valuation provider has committed multiple valuation errors.
- The valuation continues to be monitored and the breach remains unresolved.

There may be different escalation procedures depending on the severity of the breach. For example, material valuation errors may be flagged to a higher-level committee which may have a responsibility to notify named individuals and/or the Board including to propose remedial action(s) or notify their regulator where required.

Capability/skill sets

An effective valuation monitoring process for private assets is likely to involve collaboration across a number of teams (asset managers, first line investment teams, second line oversight and senior management/Board visibility). The valuation skill set is much varied for private assets vs. public, and spans across a number of disciplines. For example, private debt would require loan experts and those well-versed in covenant law, Infrastructure requires understanding of government contracts/negotiations. The unique nature of some private assets may mean that investment teams, valuation committee, investment committee and Boards may need specialist training and relevant backgrounds, adding to the overhead of managing private assets.

Resource

A key consideration when designing a monitoring framework is the resource available. Resource should be considered both in terms of personnel and budget. With regards to personnel, the headcount available and the expertise of that headcount should be taken into account. If the valuation monitoring will be performed by investment analysts, for example, it should be understood that they may not have all of the expertise required to monitor complex valuations. In a similar way, whilst someone with a general background may prove useful, this should ideally be balanced with private market valuation experience. With regards to budget, if available, this could be used to either outsource some elements of the process, or work with a consultant to validate or assist with certain areas. There are also a number of third-party valuation experts who could provide some more in-depth services, for example re-calculating the valuations, however this could be a costly option.

Documentation

Extensive documentation may be desirable but balanced against the resource available and the monitoring process selected. At the very minimum, the monitoring framework should be documented, including:

- Description of key tasks
- Responsibility for each task (team and any relevant named individuals)
- Timescales / timeline for performing the task
- Key inputs required
- Key outputs to be produced
- Decisions taken and rational for exceptions;
- Governance (committee oversight)

As and when various tasks are performed, any inputs should be safely archived, and outputs and findings should be clearly documented, especially any committee packs with formal findings and recommendations, as these could be reviewed as part of an audit. Finally, any third-party materials should also be safely stored and tagged as third-party opinion, data, input and/or recommendation.

5. Implementation of the Valuation Monitoring Framework

The policy framework design adopted by the committee could be "light touch" or more "in depth" depending on the size of the exposure, the risk appetite of the Company and Board, resources available and any other relevant considerations. Below we illustrate and describe a range of potential considerations which can guide the design and implementation of the policy framework:

Light touch	Considerations	In-depth
Limited	Choice of valuation method	Wide range
Limited	Valuation inputs	Wide range
Limited	Checks/validation	Data, assumptions, models
None	Stress/scenario testing	Integral
Infrequent	Monitoring frequency	Often, as appropriate
None	Intervention thresholds	Calibrated to risk appetites

Choice of valuation method

This can include forming an understanding of the sensitivity of the valuation result to the choice of valuation method, the inherent limitations, strengths, and weakness of the method itself, as well as the degree of expert subjectivity required. A second opinion could be deemed appropriate or mandated in some cases e.g. more material, complex/unique asset etc.

Valuation inputs

This seeks to form a view on the robustness of key inputs, including questions around:

- Are reference prices directly comparable or are material adjustments necessary? How are such prices sourced? How extensive, comprehensive and timely is the source database? How frequently is it updated?
- How have cash flow projections been determined for DCF purposes? Are there any unusual features that add complexity to cash flow projections and/or terminal values? How sensitive is the valuation result to these more unusual features?
- How sensitive is the valuation of any fixed income investment to the credit rating? Which rating agency has been used to obtain the credit rating? Would a similar rating be obtained if using an alternative provider?

Data may be scarce and/or private assets having few features common to assets available in the public space. This reduces the reliability on traditional statistical techniques where a credible data set is typically required.

Formal checks/validation

This can include a range of potential checks and validation approaches including:

1. Developing "proxy tools" to be able to conduct a broad high-level sense check of the private asset valuation result, where this is plausible. For example, this could include:
   a. making a direct comparison with similar public assets or indices
   b. developing an internal broad proxy model based on reference prices/benchmarks
   c. conducting DCF analysis to calculate "implied illiquidity premiums"

2. Performing random or targeted investment level validation checks and due diligence. This can include a review of the quality, accuracy, and timeliness of inputs and of the overall result. Where appropriate, it could include seeking an independent verification of data.

3. Developing a more bespoke checking/validation process for more unique private investments. This can be relevant in situations where it is difficult to develop a proxy model or there are unusual structuring features making it challenging to check inputs without further expertise.

The goal of these proxy tools and validation approaches would not be to provide an alternative valuation but rather to develop an understanding of the valuation results and to identify areas where more scrutiny may be warranted. For example, the output of the proxy tool and the actual valuation may be compared to historic tolerance bands to determine if the result is outside typical ranges and to identify if the result should be investigated further.

Over the years, more and more proxies have sprung up, and even listed private equity funds and growing secondaries market can provide a reference pricing data point. With an evolving market (both sources of data point and techniques), firms may look to incorporate a review of new pricing references as part of the regular checks/validation, and may also recognise that the new data can cause past 'ranges' to be less reliable.

Stress/scenario testing

Stress and scenario testing involves altering parameters/assumptions in the valuation model to understand how the modelled value could change under different situations.

Stress and scenario testing is also a way of measuring model risk i.e., the risk that the inputs into the fair value model and stressed fair value model are incorrect. The stresses could consider historic events (GFC , Covid, UK LDI) to understand impact on valuations and other monitoring events of interest.

General market practice is to consider a range of severities to cover day-to-day volatility as well as tail risk e.g. 1-in-5, 1-in-10, 1-in-100 year events.

Risk factors stressed or scenarios created can include areas such as such as:

- Risk free rate
- Credit spread
- Credit transition (if rated)
- Illiquidity premium
- Correlations within a portfolio
- Cashflows
- Default rate
- Recovery rate
- Collateral value
- Fundamentals e.g. EBITDA
- Factors of any comparable that feed into the valuation
- Equity risk premium
- Leverage

There may be other specifics to private investing that need to be taken into consideration relative to more traditional public investments. For example, private assets valuations can be affected by contagion risk within the financial markets and is an example of why valuation monitoring is required. The events of 2022 (UK LDI crisis) are a good reminder to investors in private assets to ensure that they understand the liquidity of their holdings, including possible exit strategies, for example via the secondary market, and any impact this may have on the realised investment. When financial markets are volatile, more enhanced monitoring could be considered as could appropriate reserving for uncertainty associated with the value of holding.

Monitoring frequency

This aspect of policy considers how often the valuation of the asset in question is to be obtained and how this influences the monitoring process. For example, if an “in-depth” process is required, then it is likely that the frequency of valuation and monitoring needs to be higher (e.g. quarterly) than if only a light tough approach is undertaken e.g. annual.

Intervention thresholds

Setting pre-determined thresholds can serve as a flag to prompt some action, investigation and/or discussion. For example, intervention thresholds can be set at a range where they are expected to be triggered more or less frequently, as desired e.g. valuations are at the 90^{th} percentile of historical valuations or by comparison to a public or other market reference. Special considerations would be given to investments where data is scarce.

6. Conclusion

Valuation uncertainty is becoming a more material issue due to the trend of the increasing allocation to private markets. In our view this is a complex area and touches upon many aspects of the governance and oversight of insurers, pension funds and other asset owners. It is therefore important that asset owners and supervisory bodies continue to develop their capabilities to scrutinise and monitor valuations, to include an understanding of the sources of valuation uncertainty in what is a growing and evolving asset space.. We hope the suggestions and framework outlined are helpful in this regard.

7. Further Reading

International Accounting Standards Board, 2020, International Financial Reporting Standards (IFRS - IFRS 13 Fair Value Measurement) //www.ifrs.org/issued-standards/list-of-standards/ifrs-13-fair-value-measurement

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London

7th Floor · Holborn Gate · 326-330 High Holborn · London · WC1V 7PP
Tel: +44 (0) 20 7632 2100 · Fax: +44 (0) 20 7632 2111

Edinburgh

Level 2 ·Exchange Crescent · 7 Conference Square · Edinburgh ·EH3 8RA
Tel: +44 (0) 131 240 1300 · Fax +44 (0) 131 240 1311

Oxford

1st Floor · Park Central · 40/41 Park End Street · Oxford · OX1 1JD
Tel: +44 (0) 1865 268 200 · Fax: +44 (0) 1865 268 211

Beijing

Level 14 · China World Office · No.1 Jianguomenwai Avenue · Chaoyang District · Beijing, China 100004
Tel: + +86 (10) 6535 0248

Hong Kong

1803 Tower One · Lippo Centre · 89 Queensway · Hong Kong
Tel: +11 (0) 852 2147 9418

Singapore

5 Shenton Way · UIC Building · #10-01 · Singapore · 068808
Tel: +65 8778 1784

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