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International Private Equity and Venture Capital **Valuation Guidelines**



IPEV

International Private Equity
and Venture Capital
Valuation Guidelines

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Preface

The International Private Equity and Venture Capital Valuation (IPEV) Guidelines ('Valuation Guidelines') set out recommendations, intended to represent current best practice, on the valuation of Private Capital Investments. The term "Private Capital" is used in these Valuation Guidelines in a broad sense to include privately held (i.e., unlisted) Investments in early stage ventures, management buyouts, management buyins, infrastructure, credit and similar Investments and Investments in Funds making such Investments.

The Valuation Guidelines, as presented in section I and appendix 1, are intended to be applicable across the whole range of Alternative Funds (seed and start-up venture capital, buyouts, growth/development capital, infrastructure, credit, etc.; hereafter collectively referred to as Private Capital Funds) and financial instruments commonly held by such Funds. They also provide a basis for valuing Investments by other entities, including Fund-of-Funds, in such Private Capital Funds. The Valuation Guidelines have been prepared with the goal that Fair Value measurements derived when using these guidelines are compliant with both International Financial Reporting Standards (IFRS) and United States Generally Accepted Accounting Principles (US GAAP). This has been done in order to provide a framework, which is consistent with accounting principles, that Private Capital Funds should utilise to determine a Fair Value for Investments. Other jurisdictions that use a similar definition of Fair Value, such as "willing buyer and willing seller" may also find these Valuation Guidelines applicable. It should be noted that these Valuation Guidelines may for good reason differ from guidance published by others with respect to valuing privately held securities issued as compensation.

The Valuation Guidelines are included in section I with explanatory comments. The Valuation Guidelines are repeated at appendix 1 without commentary. Section I presents the Valuation Guidelines themselves, shaded, surrounded by a border and set out in bold type, with accompanying explanations, illustrations, background material, context, and supporting commentary to assist in their interpretation. Section II provides application guidance for specific situations.

Where there is conflict between the content of these Valuation Guidelines and the requirements of any applicable laws or regulations or accounting standard or generally accepted accounting principles, the latter requirements should take precedence.

These Valuation Guidelines should be regarded as superseding the previous 2015 Valuation Guidelines issued by the IPEV Board and are considered in effect for reporting periods beginning on or after 1 January 2019. Earlier adoption is encouraged.



Introduction

Private Capital managers may be required to carry out periodic valuations of Investments as part of the reporting process to investors in the Funds they manage. The objective of these Valuation Guidelines is to set out best practice where Private Capital Investments are reported at 'Fair Value' and hence to help investors in Private Capital Funds make better economic decisions.

The increasing importance placed by international accounting authorities on Fair Value reinforces the need for the consistent use of valuation practices worldwide and these Valuation Guidelines provide a framework for consistently determining valuations for the type of Investments held by Private Capital Funds.

Private Capital Funds are typically governed by a combination of legal or regulatory provisions or by contractual terms. It is not the intention of these Valuation Guidelines to prescribe or recommend the basis on which Investments are included in the financial statements of Private Capital Funds. The IPEV Board confirms Fair Value as the best measure for valuing Investments in and by Private Capital Funds. The Board's support for Fair Value is underpinned by the transparency it affords investors in Funds which use Fair Value as an indication of performance of a portfolio in the interim. In addition, institutional investors require Fair Value to make asset allocation decisions and produce financial statements for regulatory purposes.

These Valuation Guidelines differentiate among the **basis of valuation** (Fair Value), which defines what the carrying amount purports to represent, a **Valuation Technique** (such as the earnings multiple technique), which details the method or technique for deriving a valuation, and **inputs** used in the Valuation Technique (such as EBITDA).

Financial reporting standards do not require that these Valuation Guidelines be followed. However, while Valuers must conclude for themselves whether or not their Fair Value measurements are compliant with relevant financial reporting standards, measuring Fair Value in compliance with relevant financial reporting standards can be achieved by following these Valuation Guidelines.

These Valuation Guidelines are intended to represent current best practice and therefore will be revisited and, if necessary, revised to reflect changes in regulation or accounting standards.

Private Capital by its nature utilises confidential, non-public information. However, Investors in Private Capital Funds need sufficient, timely, comparable, and transparent information from their Managers to allow Investors to:

- Exercise fiduciary duty in monitoring deployed Investment capital;
- Report periodic performance to ultimate Investors, beneficiaries, boards, etc., as applicable; and
- Prepare financial statements that are consistent with applicable accounting standards.



Investors may also use the Fair Value information to:

- Make asset allocation decisions;
- Make manager selection decisions; and
- Make investor level incentive compensation decisions.

Readers should note that these Valuation Guidelines address financial valuation issues only. The IPEV Board, after thorough discussion and consultation, has concluded that matters relating to the reporting and evaluation of non-financial factors or inputs in the context of a Fund's responsible investment practices, including environmental, social, and governance factors, are conceptually included in these Valuation Guidelines where their impact is financial, but are otherwise outside the scope of this document.

These Valuation Guidelines are focused on articulating valuation best practice from a conceptual, practical, and investor reporting standpoint. Given differences in local regulation, they do not seek to fully address best practice as it relates to internal processes, controls and procedures, governance aspects, committee oversights, the experience and capabilities required of the Valuer, or the audit or review of valuations. However, where appropriate the Valuation Guidelines do provide guidance with respect to valuation process best practice as discussed in the following.



Application of the Guidelines

These Guidelines are intended to articulate best practices with respect to valuing all debt and equity Investments of Investment Entities/ Companies. As such, these Guidelines articulate principles which encourage:

- Consistency of valuation methodology at each Measurement Date and for similar Investments;
- Appropriateness of valuation judgments consistent with market participant assumptions;
- Calibrating valuation inputs; and
- Rigour and thoughtfulness of valuation approach.

In addition to the application of the Guidelines presented below, a robust valuation process will incorporate industry best practice regarding the valuation process and documentation. Common and better practice would include, but not be limited to, the following:

- A written robust valuation policy, incorporating these Guidelines, that requires documentation of the procedures and methodologies to be used to determine the Fair Value of each individual Investment in the Fund's portfolio;
- Documentation of the inputs and assumptions included in the valuation analysis and the rationale supporting the conclusion of value;
- Use of an independent internal valuation committee and/or external advisers to review methodologies, significant inputs, and Fair Value estimates for reasonableness; and
- Incorporation of Backtesting as a component of the valuation process.

The best practices listed above are not intended to be all-inclusive, but instead provide consideration for additional steps that should be considered when applying the Valuation Guidelines within the context of a robust transparent valuation policy.



Section I: Valuation Guidelines

including Explanatory Comments

Section I presents the Valuation Guidelines themselves, shaded, surrounded by a border, and set out in bold type, followed by accompanying explanations, illustrations, background material, context, and supporting commentary, to assist in the interpretation of the Valuation Guidelines. Section II provides further application guidance for specific situations.

1. The Concept of Fair Value

1.1 Fair Value is the price that would be received to sell an asset in an Orderly Transaction between Market Participants at the Measurement Date.

1.2 A Fair Value measurement assumes that a hypothetical transaction to sell an asset takes place in the Principal Market or in its absence, the Most Advantageous Market for the asset.

1.3 For actively traded (quoted) Investments, available market prices will be the exclusive basis for the measurement of Fair Value for identical instruments.

1.4 For Unquoted Investments, the measurement of Fair Value requires the Valuer to assume the Investment is realised or sold at the Measurement Date whether or not the instrument or the Investee Company is prepared for sale or whether its shareholders intend to sell in the near future.

1.5 Some Funds invest in multiple securities or tranches of the same Investee Company. If a Market Participant would be expected to transact all positions in the same underlying Investee Company simultaneously, for example separate Investments made in series A, series B, and series C, then Fair Value would be estimated for the aggregate Investment in the Investee Company. If a Market Participant would be expected to transact separately, for example purchasing series A independent from series B and series C, or if Debt Investments are purchased independent of equity, then Fair Value would be more appropriately determined for each individual financial instrument.

1.6 Fair Value should be estimated using consistent Valuation Techniques from Measurement Date to Measurement Date unless there is a change in market conditions or Investment-specific factors, which would modify how a Market Participant would determine value. The use of consistent Valuation Techniques for Investments with similar characteristics, industries, and/or geographies would also be expected.

The objective of measuring Fair Value is to estimate the price at which an Orderly Transaction would take place between Market Participants at the Measurement Date.

Fair Value is the hypothetical exchange price taking into account current market conditions for buying and selling assets. Fair Value is not the amount that an entity would receive or pay in a Forced Transaction, involuntary liquidation, or distressed sale.



Although transfers of shares in private businesses are often subject to restrictions, rights of pre-emption, and other barriers, it should still be possible to estimate what amount a willing buyer would pay to take ownership of the Investment, subject to such restrictions.

The estimation of Fair Value assumes that the time period required to consummate a transaction hypothetically began at a point in time in advance of the Measurement Date such that the hypothetical exchange culminates on the Measurement Date. Therefore, Fair Value should reflect the actual amount that a seller would receive in an Orderly Transaction under current market conditions at the Measurement Date. An additional discount for Marketability (where Marketability is defined as the time required to complete a transaction) is not appropriate. However, liquidity or illiquidity (meaning the frequency of transactions) is taken into account by Market Participants and therefore should be a factor used in assessing Fair Value.

Fair Value measurements are determined consistent with the ownership structure of the Investment. That means that Fair Value is determined independently for each reporting entity.

Once a Valuation Technique or Techniques have been selected, they should be applied consistently (from Measurement Date to Measurement Date); however, a change in technique is appropriate if it results in a measurement that is more representative of Fair Value in the circumstances. If a change in Valuation Technique(s) is deemed appropriate, the basis for such a change should be clearly documented including, but not limited to, the nature and rationale for the change.

Examples of events that might appropriately lead to a change in Valuation Technique:

- The stage of development of the Enterprise changes (from pre-revenue to revenue to earnings);
- New markets develop;
- New information becomes available;
- Information previously used is no longer available;
- Valuation Techniques improve; and
- Market conditions change.

Further, subject to utilising Market Participant perspectives, Investments with similar characteristics, stages of development, geographies, and/or industries would be expected to be valued using consistent Valuation Techniques.

1.7 Unit of Account

1.7 To estimate Fair Value, the Unit of Account must be determined. The Unit of Account represents the specific Investment that is being measured at Fair Value.

Many Funds make Investments in multiple types of Investment instruments within an entity (such as common stock, various classes of preferred stock, various debt tranches and equity-based options). US and International financial reporting standards require the Fair Value of an Investment to be measured consistently with the level of aggregation (Unit of Account) dictated by the accounting standard requiring or permitting its measurement at Fair Value. The Unit of Account is a level of



aggregation concept that was developed for financial reporting purposes, that is, it addresses the way in which assets and liabilities are to be aggregated or disaggregated in the financial statements. Because financial reporting is meant to portray economic phenomena, the Unit of Account attempts to describe the specific way that an Investment is owned, including the legal rights and obligations of ownership and its relationship to other ownership rights in a complex capital structure. However, actual transactions may not and do not actually have to take place at the Unit of Account level specified by accounting standards.

For valuation purposes, typically, the Unit of Account is determined based on the way a Market Participant would transact for the individual Investment held in a Fund which is also consistent with the aggregation provided to investors in the schedule of Investments.

For private equity and venture capital Investments, value is generally realised through a sale or flotation of the entire Investee Company, rather than through a transfer of individual shareholder stakes. The value of the business as a whole (Enterprise Value) at the Measurement Date will often provide a key insight into the value of Investment stakes in that business.¹

If value is realised as described above, then Enterprise Value would be used by a Market Participant to determine the orderly price they would pay for an Investment. Alternatively, if a Market Participant would transact for individual instruments, such as individual shares, debt tranches, or a single series of equity, then Fair Value would be more appropriately assessed at the individual instrument level.

See section II 5.1 for further discussion of the Unit of Account.

¹ Some have interpreted International Financial Reporting Standards as requiring the Unit of Account to be a single share of a private company (see discussion of Financial Reporting Standards and Unit of Account in section II 5.1 of these Valuation Guidelines). These Valuation Guidelines do not address a single share Unit of Account conclusion (other than for actively traded securities) as a Fair Value measurement for a single share of a private company generally does not occur in practice and therefore would not reflect Market Participant assumptions and would not provide a meaningful measurement of Fair Value.



2. Principles of Valuation

2.1 The Fair Value of each Investment should be assessed at each Measurement Date.

In the absence of an Active Market for a financial instrument, the Valuer must estimate Fair Value utilising one or more of the Valuation Techniques.

2.2 In estimating Fair Value for an Investment, the Valuer should apply a technique or techniques that is/are appropriate in light of the nature, facts, and circumstances of the Investment and should use reasonable current market data and inputs combined with Market Participant assumptions.

2.3 Fair Value is estimated using the perspective of Market Participants and market conditions at the Measurement Date irrespective of which Valuation Techniques are used.

The following are key considerations when estimating Fair Value using Market Participant perspectives:

- Fair Value should be estimated at each Measurement Date (each time Fair Value based Net Asset Value (NAV) is reported to investors (LPs)).
- The Price of a Recent Investment (if deemed Fair Value) should be used to calibrate inputs to the valuation model(s).
- Calibration is required by accounting standards.
- Market Participant perspectives should be used to estimate Fair Value at each Measurement Date.
- After considering individual facts and circumstances and applying these Guidelines, it is possible that Fair Value at a subsequent Measurement Date is the same as Fair Value as at a prior Measurement Date. This means that Fair Value may be equal to the Price of a Recent Investment; however, the Price of a Recent Investment is not automatically deemed to be Fair Value.

These concepts are more fully described throughout this document.



2.4 Allocating Enterprise Value

2.4 Generally, for Private Capital Investments, Market Participants determine the price they will pay for individual equity instruments using Enterprise Value estimated from a hypothetical sale of the equity which may be determined by considering the sale of the Investee Company, as follows:

- i.** Determine the Enterprise Value of the Investee Company using the Valuation Techniques;
- ii.** Adjust the Enterprise Value for factors that a Market Participant would take into account such as surplus assets or excess liabilities and other contingencies and relevant factors, to derive an Adjusted Enterprise Value for the Investee Company;
- iii.** Deduct from this amount the value, from a Market Participant's perspective, of any financial instruments ranking ahead of the highest-ranking instrument of the Fund in a sale of the Investee Company.
- iv.** Take into account the effect of any instrument that may dilute the Fund's Investment to derive the Attributable Enterprise Value;
- v.** Apportion the Attributable Enterprise Value between the Investee Company's relevant financial instruments according to their ranking;
- vi.** Allocate the amounts derived according to the Fund's holding in each financial instrument, representing their Fair Value.

It is important to recognise the subjective nature of Private Capital Investment valuation. It is inherently based on forward-looking estimates and judgements about the Investee Company itself: its market and the environment in which it operates; the state of the mergers and acquisitions market; stock market conditions and other factors and expectations that exist at the Measurement Date.

Due to the complex interaction of these factors and often the lack of directly comparable market transactions, care should be applied when using publicly available information regarding other entities in deriving a valuation. In order to measure the Fair Value of an Investment, the Valuer will have to exercise judgement and make necessary estimates to adjust the market data to reflect the potential impact of other factors such as geography, credit risk, foreign currency, rights attributable, equity prices and volatility.

As such, it must be recognised that, while valuations do provide useful interim indications of the progress of a particular Investee Company or Investment, ultimately it is not until Realisation that actual results are determined. A Valuer should be aware of reasons why Realisation proceeds are different from their estimates of Fair Value and consider such reasons in future Fair Value estimates. The concept of Backtesting, as described in Section I 2.7, can assist in enhancing the valuation process.

These Guidelines highlight the allocation of Attributable Enterprise Value as a technique to determine the Fair Value of an Investment as it is commonly used. It should be noted that other techniques may be appropriate depending on the facts and circumstances such as considering the value of the Investment from the perspective of a Market Participant with similar Investment objectives, return expectations, and time horizon. Some have articulated this approach as a "step into the shoes" perspective. Ultimately, Fair Value should be determined based on Market Participant assumptions as to the value that would be received for the Investment at the Measurement Date.



Apportion the Attributable Enterprise Value appropriately

The apportionment should reflect the respective amounts accruing to the holder of each financial instrument and all other financial instruments (regardless of holder) in the event of a Realisation at the Measurement Date. As discussed further in section II 5.8, where there are ratchets or share options or other mechanisms (such as 'liquidation preferences', in the case of Investments in early-stage businesses) in place which are likely to be triggered in the event of a sale of the company at the given Enterprise Value at that date, these should be reflected in the apportionment.

The estimation of Fair Value should be undertaken on the assumption that options and warrants are exercised, where the Fair Value is in excess of the exercise price and accordingly it is a reasonable assumption that these will be exercised. The aggregate exercise price of these may result in surplus cash arising in the Investee Company if the aggregate exercise price is significant.

Where significant positions in options and warrants are held by the Fund, these may need to be valued separately from the underlying Investments using an appropriate option-based pricing model.

Differential allocation of proceeds may have an impact on the value of an Investment. If liquidation preferences exist, these need to be reviewed to assess whether they are expected to give rise to a benefit to the Fund, or a benefit to a third party to the detriment of the Fund.

Determining the value of debt to be deducted

Many investment structures include third party debt that has a higher-ranking claim on the enterprise than the Investment of the Fund. To estimate the attributable Enterprise Value, such debt is deducted from Adjusted Enterprise Value. When deducting outstanding debt from Enterprise Value to calculate the Fair Value of equity Investments, judgement should be exercised to ensure that the amount deducted represents a Market Participant perspective.

For example, if the debt must be repaid upon the sale of the Investee Company, which is often the case in a private equity transaction, then a Market Participant transacting in their economic best interest, may assume that a hypothetical change in control occurs on the Measurement Date and thus deem the amount to be deducted to equal the par or payoff value of debt (i.e. the amount to be repaid). However, a Market Participant may take into account the timing and likelihood of a future actual change in control (that is, assuming that a change in control has not yet taken place as of the Measurement Date, but incorporating into the value deducted the existence of the change in control provision).

If debt would not be repaid when the Enterprise is sold, then the amount deducted would not necessarily equal the par or payoff value of debt. It would be impacted by favourable or unfavourable terms (such as interest rate) of the debt, or in other words, the value of debt reflecting the favourable/unfavourable elements would be deducted from Adjusted Enterprise Value.

An additional question arises if the debt includes special features such as a prepayment penalty. In such circumstances, consideration must be given to the price at which Market Participants would transact to maximise value. The prepayment penalty would be incorporated into the amount



deducted based on the probability it would be paid. When using a Market Participant perspective, the value deducted may or may not equal the face, par, or payoff value of debt depending on the facts and circumstances.

- a. If the debt is required to be repaid upon a change of control with a prepayment penalty, the probability of the prepayment penalty being assessed, based on considerations including but not limited to the expected duration and ability to negotiate with lenders, would be incorporated into the amount deducted.
- b. If the debt is not required to be repaid upon a change of control, then the amount deducted would be impacted by any favourable or unfavourable terms (such as interest rate) of the debt in determining the amount that would be deducted from Adjusted Enterprise Value.

Note: If the Investment is in the debt of an Investee Company, the Fair Value of the Debt Investment would be determined using a Market and/or Income Approach taking into account risk, coupon, time to expected repayment, and other market conditions in determining the Fair Value of the Debt Investment, which would generally not be equivalent to par value (see Guidelines 3.6 or 3.8; also see section II 5.5 Debt Investments and appendix 2, Application of IFRS 9 / Accounting Standards Codification (ASC) Topic 946 to Debt Investments).

Where the debt is trading at a discount to par, this lower amount would not normally be deducted from the Enterprise Value until the Investee Company or the Fund has acquired that Debt in the market at that value and intends to cancel the debt rather than seek repayment at par.

Dilution

A Fair Value estimate reflects Market Participant perspectives. Many Private Capital Investments contemplate potential dilution. For example, dilution occurs because of ownership interests provided to Investee Company management that may vest over time. Vesting as of the Measurement Date would be taken into account in estimating Fair Value.

Dilution may also be expected with early-stage Investments where additional rounds of financing include terms where existing shareholders' ownership percentage is reduced as additional capital is raised. Fair Value reflects the ownership stake at a given Measurement Date. In some circumstances and often in early-stage Investments, value determined through a scenario analysis may need to reflect potential anticipated dilution at ultimate exit resulting from additional rounds of financing.

2.5 Exercising Prudent Judgement

2.5 Because of the uncertainties inherent in estimating Fair Value for Private Capital Investments, care should be applied in exercising judgement and making the necessary estimates. However, the Valuer should be wary of applying excessive caution.

Private Capital Funds often undertake an Investment with a view to build, develop, and/or to effect substantial changes in the Investee Company, whether it is to its strategy, operations, management,



or financial condition. Sometimes these situations involve rescue refinancing or a turnaround of the business in question. While it might be difficult in these situations to measure Fair Value, it should in most cases be possible to estimate the amount a Market Participant would pay for the Investment in question at a point in time.

There may be situations where:

- the range of reasonable Fair Value estimates is significant;
- the probabilities of the various estimates within the range cannot be reasonably assessed;
- the probability and financial impact of achieving a key milestone cannot be reasonably predicted; and
- there has been no recent Investment into the business.

While these situations prove difficult, the Valuer must still come to a conclusion as to their best estimate of the hypothetical exchange price between willing Market Participants.

Estimating the increase or decrease in Fair Value in such cases may involve reference to broad indicators of value change (such as relevant stock market indices). After considering these broad indicators, in some situations, the Valuer might reasonably conclude that the Fair Value at the previous Measurement Date remains the best estimate of current Fair Value.

Where a change in Fair Value is perceived to have occurred, the Valuer should amend the carrying value of the Investment to reflect the new Fair Value estimate.

2.6 Calibration

2.6 When the price of the initial Investment in an Investee Company or instrument is deemed Fair Value (which is generally the case if the entry transaction is considered an Orderly Transaction, then the Valuation Techniques that are expected to be used to estimate Fair Value in the future should be evaluated using market inputs as of the date the Investment was made. This process is known as Calibration. Calibration validates that the Valuation Techniques using contemporaneous market inputs will generate Fair Value at inception and therefore that the Valuation Techniques using updated market inputs as of each subsequent Measurement Date will generate Fair Value at each such date.

Fair Value should reflect reasonable estimates and assumptions for all significant factors that parties to an arm's length transaction would be expected to consider, including those which have an impact upon the expected cash flows from the Investment and upon the degree of risk associated with those cash flows.

In assessing the reasonableness of assumptions and estimates, the Valuer should:

- note that the objective is to replicate those assumptions that the parties in an arm's-length transaction would make at the Measurement Date;
- take account of events taking place subsequent to the Measurement Date where they provide additional evidence of conditions that existed at the Measurement Date that were known or knowable by Market Participants;



- take account of then current market conditions at each Measurement Date; and
- to the extent the initial entry price is deemed Fair Value, test (or calibrate) the Valuation Techniques expected to be used at subsequent valuation dates, using input data at inception to ensure that the Valuation Techniques result in an initial Fair Value estimate equal to the entry price (Note: at subsequent Measurement Dates the calibrated Valuation Techniques should be used with then current market inputs reflecting then current market conditions).

Calibration is a powerful tool that can assist in capturing the impacts of control and Liquidity, among other inputs, on a Fair Value measurement. For illustrative purposes, assume an Investment is purchased at Fair Value at an implied 10x EBITDA multiple. At the time of purchase, comparable companies are trading at 12x EBITDA. When compared to the comparable companies, the 10x entry multiple incorporates Liquidity, control, and other differences between the Investment and comparable companies. At future Measurement Dates, judgement would be applied to determine how to move the acquisition multiple of 10x in relation to changes in the multiple of comparable companies.

For example, if the comparable companies moved from 12x to 15x, the Valuer may conclude that the two turns of EBITDA difference at entry (10x vs 12x) should be maintained, resulting in a Fair Value estimate derived by applying a 13x multiple to the Investee Company's updated EBITDA. Similar judgements would be made using inputs for other Valuation Techniques. The Valuer would not automatically use the entry difference (2x) at future valuation dates, but would determine how much a Market Participant would be willing to pay for the Investment using the calibrated entry inputs as a point of reference. Note: the Valuer has discretion, based on the facts and circumstances, to consider, on a consistent basis, whether an absolute movement or a relative (percentage) movement between multiples would be more appropriate.

Similar calibration concepts can be used with an income valuation approach. The discount rate implied at acquisition can be deconstructed into its component parts based on the weighted average cost of capital, which will, in particular, provide a basis for a company specific risk premium, also known as alpha. The components of the weighted average cost of capital would then be updated at future Measurement Dates based on then current market conditions (with adjustments to the alpha based on company specific facts and circumstances) and applied to most likely cash flows at that point in time.

2.7 Backtesting

2.7 Valuers should seek to understand the substantive differences that legitimately occur between the exit price and the previous Fair Value assessment. This concept is known as Backtesting. Backtesting seeks to articulate:

- i. What information was known or knowable as of the Measurement Date;**
- ii. Assess how such information was considered in coming to the most recent Fair Value estimates; and**
- iii. Determine whether known or knowable information was properly considered in determining Fair Value given the actual exit price results.**



Backtesting is the process of comparing an actual liquidity event (sale, IPO, etc.) to the most recently determined Fair Value estimate. When the valuation implied by an actual Realisation or liquidity event is compared to Fair Value estimates at the most recent Measurement Dates, the Valuer is provided with additional information to help assess the rigour of the Fair Value estimation process. This does not mean that the exit price should equal the previous Fair Value measurement, but should be used as an input to continuously improve the rigour of the Fair Value estimates.

Backtesting is not used to identify theoretical mistakes, if any, in the valuation process, but rather to encourage the Valuer to assess changes in information, market conditions, Market Participants, etc. that may have occurred between the Measurement Date and the exit date.

Backtesting can provide meaningful insights that could be applied when developing future Fair Value estimates. Over time, Backtesting provides the Valuer with a tool to assess whether there are inherent biases (e.g. overly conservative assumptions) built into the valuation process and thereby identify areas for potential improvement.

Backtesting can also be used to assess the reliability of assumptions used to estimate Fair Value, such as, but not limited to, maintainable EBITDA, normalised net debt, etc.



3. Valuation Methods

3.1 General

3.1 (i) In determining the Fair Value of an Investment, the Valuer should use judgement. This includes consideration of those specific terms of the Investment that may impact its Fair Value. In this regard, the Valuer should consider the economic substance of the Investment, which may take precedence over the strict legal form.

3.1 (ii) Where the reporting currency of the Fund is different from the currency in which the Investment is denominated, translation into the reporting currency for reporting purposes should be done using the bid spot exchange rate prevailing at the Measurement Date.

A number of valuation methods or techniques that may be considered for use in measuring the Fair Value of Unquoted Investments are described in section II 3.3 to 3.8 below. These Valuation Techniques should incorporate case-specific factors affecting Fair Value. For example, if the Investee Company is holding surplus cash or other assets, the value of the business should reflect that fact to the extent a Market Participant would attribute value to such items.

Techniques for valuing Actively Traded Investments are described in section II 3.6 below.

In the Private Capital arena, because value is generally realised through a sale or flotation of the entire Investee Company, rather than through a transfer of individual shareholder stakes, the value of the business as a whole at the Measurement Date will often provide a key insight into the value of Investment stakes in that business. For this reason, a number of the techniques described below involve estimating the Enterprise Value as an initial step. If a Market Participant would be expected to maximise value through the sale of the entire business, the estimation of the Fair Value of individual financial instruments would include an assessment of the allocation of the Enterprise Value to those individual financial instruments.

There will be some situations where the Fair Value will derive mainly from the expected cash flows and risk of the relevant financial instruments rather than from the Enterprise Value. The Valuation Technique used in such circumstances should reflect relevant exit expectations.

There may also be some situations in which determining the Enterprise Value under the assumption that the Enterprise would be sold at the Measurement Date may not be appropriate. For example, if a minority stake is being valued and the other owners' interests are not aligned, it may not be appropriate to assume a sale of the Enterprise and allocation of value as described below. In such circumstances alternative Valuation Techniques would be used as more fully discussed in section II 5.10.

Investee Companies may operate using multiple currencies. Investments may be denominated in currencies other than the Fund's reporting currency. Movements in rates of exchange may impact the value of the Fund's Investments and these changes should be taken into account using a Market Participant perspective.



3.2 Apply Judgement in Selecting Valuation Techniques

3.2 The Valuer should exercise their judgement to select the Valuation Technique or techniques most appropriate for a particular Investment.

The key criterion in selecting a Valuation Technique is that it should be appropriate in light of the nature, facts and circumstances of the Investment and in the expected view of Market Participants. The Valuer may consider utilising further techniques to check the Fair Value derived, as appropriate.

When selecting the appropriate Valuation Technique, each Investment should be considered individually.

An appropriate Valuation Technique will incorporate available information about all factors that are likely to materially affect the Fair Value of the Investment.

The Valuer will select the Valuation Technique that is the most appropriate and consequently make valuation adjustments on the basis of their informed and experienced judgement. This will include consideration of factors such as:

- the relative applicability of the techniques used given the nature of the industry and current market conditions;
- the quality and reliability of the data used in each Valuation Technique;
- the comparability of Enterprise or transaction data;
- the stage of development of the Enterprise;
- the ability of the Enterprise to generate maintainable profits or positive cashflow;
- any additional considerations unique to the Enterprise; and
- the results of testing (calibrating) techniques and inputs to replicate the entry price of the Investment. (**Note:** at subsequent Measurement Dates the calibrated Valuation Techniques should be used with updated inputs reflecting then current market conditions. See also section I 2.6).

In assessing whether a technique is appropriate, the Valuer should maximise the use of techniques that draw heavily on observable market-based measures of risk and return. Fair Value estimates based entirely on observable market data are deemed less subjective than those based on Valuer assumptions. In some cases, observable market data may require adjustment by the Valuer to properly reflect the facts and circumstances of the Investment being valued. Such adjustments should not be automatically regarded as reducing the reliability of the Fair Value estimation.

While accounting standards do not specify a hierarchy of Valuation Techniques, the use of multiple techniques is encouraged by some. In particular, IFRS 13 (and ASC Topic 820) states that "in some cases a single Valuation Technique will be appropriate (e.g. when valuing an asset or a liability using quoted prices in an Active Market for identical assets or liabilities). In other cases, multiple Valuation Techniques will be appropriate. If multiple Valuation Techniques are used to measure Fair Value, the results (i.e. respective indications of Fair Value) shall be evaluated considering the reasonableness of the range of values indicated by those results. A Fair Value measurement is the point within that range that is most representative of Fair Value in the circumstances."²

² IFRS 13 paragraph 63; Congruent with ASC Topic 820.



Where the Valuer considers that several techniques are appropriate to value a specific Investment, the Valuer may consider the outcome of these different Valuation Techniques so that the results of one particular Valuation Technique may be used as a cross-check of values or to corroborate or otherwise be used in conjunction with one or more other techniques in order to measure the Fair Value of the Investment.

Techniques should be applied consistently from period to period, except where a change would result in better estimates of Fair Value.

The basis for any changes in Valuation Techniques should be clearly understood. It is expected that there would not be frequent changes in Valuation Techniques over the course of the life of an Investment.

3.3 Selecting the Appropriate Valuation Technique

3.3 The Valuer should use one or more of the following Valuation Techniques as of each Measurement Date, taking into account Market Participant assumptions as to how Value would be determined:

- A. Market Approach**
 - a. Multiples (3.4)
 - b. Industry Valuation Benchmarks (3.5)
 - c. Available Market Prices (3.6)
- B. Income Approach**
 - a. Discounted Cash Flows (3.7, 3.8)
- C. Replacement Cost Approach**
 - a. Net Assets (3.9)

The Price of a Recent Investment, if resulting from an orderly transaction, generally represents Fair Value as of the transaction date. At subsequent Measurement Dates, the Price of a Recent Investment may be an appropriate starting point for estimating Fair Value. However, adequate consideration must be given to the current facts and circumstances, including, but not limited to, changes in the market or changes in the performance of the Investee Company.

Inputs to Valuation Techniques should be calibrated to the Price of a Recent Investment, to the extent appropriate (3.10).

Where the Investment being valued was itself made recently, its cost may provide a good starting point for estimating Fair Value. Where there has been any recent Investment in the Investee Company, the price of that Investment may provide a basis for recalibrating inputs to the valuation model. Use of the transaction price as starting point for Fair Value assumes that the price reflects Fair Value in the market and that it includes the impact of any changes in the market and the Investee Company that have occurred since the date of the transaction.

The Valuation techniques articulated in section I 3.4 through section I 3.9 may be more applicable to established businesses. The Techniques articulated in section I 3.10 may be more applicable to early stage Investments.



3.4 Multiples

3.4 Depending on the stage of development of an Enterprise, its industry, and its geographic location, Market Participants may apply a multiple of earnings or revenue. In using the multiples Valuation Technique to estimate the Fair Value of an Enterprise, the Valuer should:

- i.** Apply a multiple that is appropriate and reasonable (given the size, risk profile and earnings growth prospects of the underlying company) to the applicable indicator of value (earnings or revenue) of the Investee Company;
- ii.** Adjust the Enterprise Value for surplus or non-operating assets or excess liabilities and other contingencies and relevant factors to derive an Adjusted Enterprise Value for the Investee Company;
- iii.** Deduct from this amount any financial instruments ranking ahead of the highest-ranking instrument of the Fund in a liquidation scenario (e.g. the amount that would be paid) and taking into account the effect of any instrument that may dilute the Fund's Investment to derive the Attributable Enterprise Value;
- iv.** Apportion the Attributable Enterprise Value appropriately between the relevant financial instruments using the perspective of potential Market Participants. Judgement is required in assessing a Market Participant perspective.

This Valuation Technique involves the application of an appropriate multiple to a performance measure (such as earnings or revenue) of the Investee Company in order to derive a value for the business.

This Valuation Technique is likely to be appropriate for an Investment in an established business with an identifiable stream of continuing earnings or revenue that is considered to be maintainable.

This section sets out guidance for preparing valuations of businesses on the basis of positive earnings. In addition, for businesses that are still in the development stage and prior to positive earnings being generated, multiples of actual or projected revenue may be used as a basis of valuation.

Appropriate multiple

By definition, multiples have as their numerator a value, such as price, Enterprise Value, etc., and as their denominator an earnings or revenue figure. The denominator can be the earnings or revenue figure for any specified period of time and multiples are often defined as 'historical', 'current', or 'forecast' to indicate the earnings or revenue used. It is important that the multiple used correlates to the period and concept of earnings or revenue of the Investee Company.

Care should be taken to ensure that the underlying accounting basis for the relevant denominator used in developing a multiple is consistent. For example, research & development costs may be treated differently under different accounting jurisdictions, including, but not limited to, US Generally Accepted Accounting Standards and International Financial Reporting Standards. Other differences may exist based on the timing and application of changes in accounting standards. In particular the timing of implementation of revised accounting standards such as those pertaining to leases and revenue recognition could cause difficulty in identifying comparable multiples.



Use of Earnings multiples

A number of earnings multiples or ratios are commonly used, including price/earnings (P/E), Enterprise Value/earnings before interest and tax (EV/EBIT) and amortisation (EV/EBITA) and depreciation (EV/EBITDA). The particular multiple used should be appropriate for the Investee Company and should conform to Market Participant assumptions. Where EBITDA multiples are available, these are commonly used.

In general, because of the role of financial structuring in Private Capital, multiples are used by Market Participants to derive an Enterprise Value for the Investee Company. The methodology for the calculation of a multiple should be consistent with Market Participant assumptions and should not change without good reason. If a Valuer does determine that a different methodology or multiple provides a more appropriate estimate of Fair Value, the reasoning for the change in the multiple should be appropriately justified.

When EBITDA multiples are not available, P/E multiples may be used since these are commonly reported. For a P/E multiple to be comparable, the two entities should have similar financing structures and levels of borrowing.

Therefore, where a P/E multiple is used, it should generally be applied to an EBIT figure which has been adjusted for the impact of finance costs relating to operations, working capital needs and tax impacts. These adjustments are designed to eliminate the effect of the acquisition finance on earnings and thus on the Enterprise Value since this is subsequently adjusted.

Use of a Revenue multiple

For Enterprises that have sustainable earnings, it would be more appropriate to utilise an earnings multiple; however, for Enterprises that have established operations but have not yet obtained sustainable profitability, a multiple of revenue may be appropriate to determine Fair Value. A revenue multiple is commonly based on an assumption as to the 'normalised' level of earnings that can be generated from that revenue. This Valuation Technique may be applicable to companies with negative earnings, if the losses are considered to be temporary and one can identify a level of 'normalised' maintainable earnings. This may involve the use of adjusted historic revenue, using a forecast level of revenue, or applying a 'sustainable' profit margin to current or forecast revenues.

The most appropriate revenues to use in this Valuation Technique would be those likely to be used by a prospective Market Participant purchaser of the business.

Acquisition multiples vs quoted company trading multiples

The Valuer would usually derive a multiple by reference to current market-based multiples, reflected in the market valuations of quoted companies or the price at which companies have changed ownership. The multiple derived from the acquisition price is calibrated with the multiple of comparable companies expected to be used in on-going valuation estimates. Differences between the acquisition multiple and the comparable companies multiples are monitored and adjusted, as appropriate, over time, given differences between the Investee Company and the comparable companies.



For example, assume the acquisition price of an Investment was deemed Fair Value (e.g. an Orderly Transaction price) and represented an EBITDA multiple of 8 when comparable company EBITDA multiples were 10. In future periods, when estimating Fair Value judgement is required as to whether or not the 20% discount to comparable company multiples should be maintained or should change at each subsequent Measurement Date.

This market-based approach presumes that the comparable companies are correctly valued by the market. While there is an argument that the market capitalisation of a quoted company reflects not the value of the company, but merely the price at which 'small parcels' of shares are exchanged, the presumption in these Valuation Guidelines is that market-based multiples are indicative of the value of the company as a whole.

Identifying similarities and differences

Where market-based multiples are used, the aim is to identify companies that are similar, in terms of risk attributes and earnings growth prospects, to the Investee Company. This is more likely to be the case where the companies are similar in terms of business activities, markets served, size, geography, and applicable tax rate.

The impact of gearing (leverage) and tax on P/E ratios

In using P/E multiples, the Valuer should note that the P/E ratios of comparable companies will be affected by the level of financial gearing (leverage) and applicable tax rate of those companies.

EBITDA multiples and depreciation / amortisation

In using EV/EBITDA multiples, the Valuer should note that such multiples, by definition, remove the impact on value of depreciation of fixed assets and amortisation of goodwill and other intangibles. If such multiples are used without sufficient care, the Valuer may fail to recognise that business decisions to spend heavily on fixed assets or to grow by acquisition rather than organically do have real costs associated with them, which should be reflected in the value attributed to the business in question.

Adjusting for points of difference

It is important that the earnings multiple of each comparable company is adjusted for points of difference between the comparable company and the Investee Company. These points of difference should be considered and assessed by reference to the two key variables of risk and earnings growth prospects that underpin the earnings multiple. In assessing the risk profile of the Investee Company, the Valuer should recognise that risk arises from a range of aspects, including the nature of the company's operations, the markets in which it operates and its competitive position in those markets, the quality of its management and employees, and, importantly in the case of private equity and venture capital Investments, its capital structure and the ability of the Fund holding the Investment to effect change in the company.



The impact of lack of Liquidity

When considering adjustments to reported multiples, the Valuer should also consider the impact of the differences between the Liquidity of the shares being valued and those on a quoted exchange. There is a risk associated with a lack of Liquidity. The Valuer should consider the extent to which a prospective acquirer of those shares would take into account the additional risks associated with holding an unquoted share.

In an Unquoted Investment, the risk arising from the lack of Liquidity is clearly greater for a shareholder who is unable to control or influence a Realisation process than for a shareholder who owns sufficient shares to drive a Realisation at will. It may reasonably be expected that a prospective Market Participant purchaser would assess that there is a higher risk associated with holding a minority position than a control position.

Calibration

Value attributed to a lack of Liquidity may be difficult to assess. Calibration provides a technique to objectively assess value attributed to a lack of Liquidity. The multiple at the date of acquisition should be calibrated against the market comparable multiples. Differences, if any, should be understood and similar differences may be expected or need to be understood at subsequent valuation dates.

Other reasons for adjustment

Other reasons why the comparable company multiples may need to be adjusted may include the following:

- the size and diversity of the entities and, therefore, the ability to withstand adverse economic conditions;
- the rate of growth of the earnings;
- the reliance on a small number of key employees;
- the diversity of the product ranges;
- the diversity and quality of the customer base;
- the level of borrowing;
- any other reason the quality of earnings may differ; and
- the risks arising from the lack of Liquidity of the shares.

Fair Value measurements should not include a premium or discount that is inconsistent with the instrument (Unit of Account) being valued. Blockage Factors are not allowed by accounting standards. However, investors in private companies generally consider their overall interest and the extent to which they act in concert with other investors. Judgement must be applied to individual facts and circumstances to assess the amount a Market Participant would pay in the context of the potential adjustments to multiples noted above.



Comparable recent transactions

Recent transactions involving the sale of similar companies are sometimes used as a frame of reference in seeking to derive a reasonable multiple. It is sometimes argued, since such transactions involve the transfer of whole companies whereas quoted multiples relate to the price for 'small parcels' of shares, that recent transactions provide a more relevant source of multiples. However, the appropriateness of the use of recent transaction data is often undermined by the following:

- the lack of forward looking financial data and other information to allow points of difference to be identified and adjusted for;
- the generally lower reliability and transparency of reported earnings figures of private companies;
- the amount of time that has passed since the transaction was negotiated/consummated;
- the impact of reputational issues, such as ESG (environmental, social, and governance) and other factors; and
- the lack of reliable pricing information for the transaction itself.

It is a matter of judgement for the Valuer as to whether, in deriving a reasonable multiple, they refer to a single comparable company or a number of companies or the earnings multiple of a quoted stock market sector or sub-sector. It may be acceptable, in particular circumstances, for the Valuer to conclude that the use of quoted sector or sub-sector multiples or an average of multiples from a 'basket' of comparable companies may be appropriate.

Maintainable earnings / Maintainable revenue

In applying a multiple to maintainable earnings or revenue, it is important that the Valuer is satisfied that the earnings/revenue figure can be relied upon. While this might tend to favour the use of audited historical figures rather than unaudited or forecast figures, it should be recognised that value is by definition a forward-looking concept, and quoted markets more often think of value in terms of 'current' and 'forecast' multiples, rather than 'historical' ones. In addition, there is the argument that the valuation should, in a dynamic environment, reflect the most recent available information. There is therefore a trade-off between the reliability and relevance of the earnings/revenue figures available to the Valuer.

On balance, while it remains a matter of judgement for the Valuer, a Market Participant perspective should be used either focused on historical earnings/revenue or focused on future earnings/revenue based on the availability and reliability of forward looking projections and multiples or historical results and multiples.

Whichever period's earnings are used, the Valuer should satisfy himself that they represent a reasonable estimate of maintainable earnings, which implies the need to adjust for exceptional or non-recurring items, the impact of discontinued activities and acquisitions, and forecast material changes in earnings. Such adjustments, if appropriate, should also be reflected in the multiple derived from comparable companies.



The earnings/revenue figure should be adjusted for non-cash or one-time revenue or expenses and calculated on a pro-forma basis reflecting any acquisitions or disposals to the extent a Market Participant buyer would make such adjustments.

3.5 Industry Valuation Benchmarks

3.5 The use of industry benchmarks is only likely to be reliable and therefore appropriate as the main basis of estimating Fair Value in limited situations and is more likely to be useful as a sanity check of values produced using other techniques.

A number of industries have industry-specific valuation benchmarks, such as 'price per bed' (for nursing home operators) and 'price per subscriber' (for cable television companies). Other industries, including certain financial services and information technology sectors and some services sectors where long-term contracts are a key feature, use multiples of revenues as a valuation benchmark.

These industry norms are often based on the assumption that investors are willing to pay for turnover (revenue) or market share, and that the normal profitability of businesses in the industry does not vary much.

3.6 (i) Quoted Investments

3.6 (i) Instruments quoted on an Active Market should be valued at the price within the bid / ask spread that is most representative of Fair Value on the Measurement Date. The Valuer should consistently use the most representative point estimate in the bid/ask spread.

Private Capital Funds may hold Quoted Investments, for which there is an available market price.

For certain Quoted Investments, there is only one market price quoted representing, for example, the value at which the most recent trade in the instrument was transacted.

For other Quoted Investments that trade less frequently, for example certain Debt Investments, there may be two market prices at the Measurement Date: the lower 'bid' price quoted by a market maker, which he will pay an investor for a holding (i.e. the investor's disposal price), and the higher 'ask' price, which an investor can expect to pay to acquire a holding. However, as an alternative to the bid price (where not required by regulation), is the mid-market price (i.e. the average of the bid and ask prices), where this is considered the most representative point estimate in the bid/ask spread.

Determining whether a quoted price is deemed to be from an Active Market requires judgment. IFRS 13 and ASC Topic 820 define an active market as "a market in which transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an on-going basis." This principles-based definition does not provide specific guidance to indicate what level of frequency and volume is sufficient to provide reliable pricing information, nor does it indicate whether transactions in over-the-counter markets (for example, pink sheets, gray sheets) would meet the definition of an active market. The Valuer will need to apply judgment, based on the nature of



the Investment, as to the frequency or volume or both that would be considered to provide reliable pricing information. For example, if a Fund holds an Investment in a traded security where the public float represents a small percentage of the total outstanding shares and trading activity is dominated by only a few holders, the Valuer may consider this level of activity not to reflect an active market that would provide reliable pricing information. Alternatively, if a Fund invests directly in securities that are traded over-the-counter and the Valuer considers this market to be its principal market, the Valuer may consider this level of activity to reflect an active market.

Even if a market is not considered to be active, observable transactions would still provide an indication of value, and would need to be considered in the Fair Value estimate. In addition, when assessing the assumed transaction for measuring Fair Value, the Valuer should consider the way in which Market Participants, acting in their economic best interest, would transact.

As previously noted, Fair Value measurements should not include a premium or discount that is inconsistent with the instrument (Unit of Account) being valued. Blockage Factors are not allowed by accounting standards.

3.6 (ii/iii) Blockage Factors and Discounts

3.6 (ii) Blockage Factors that reflect size as a characteristic of the reporting entity's holding (specifically, a factor that adjusts the quoted price of an asset because the market's normal daily trading volume is not sufficient to absorb the quantity held by the entity) should not be applied.

If a market is deemed not to be active, the Valuer may consider the use of quoted prices supplemented by additional Valuation Techniques to measure Fair Value, as appropriate.

3.6 (iii) Discounts may be applied to prices quoted in an Active Market if there is some contractual, governmental, or other legally enforceable restriction attributable to the security, not the holder, resulting in diminished Liquidity of the instrument that would impact the price a Market Participant would pay at the Measurement Date.

An example of a contractual restriction deemed attributable to the security would be an underwriter's lock-up, as any buyer of the security would be expected to abide by the same contractual lock-up provisions. Since an underwriter's lock-up effectively prevents the sale of the security, the hypothetical transaction could only take place if the lock-up accompanied the security when sold to a Market Participant, and thus the restriction would be considered to be a characteristic of the Investment.

An example of a restriction that would be deemed an attribute of the holder would be limitations on sale imposed by holding a Board of Directors seat. As the holder of the security is not mandated to hold a Board seat, it is an attribute of the holder rather than an attribute of the security. Were the holder to sell the security, the limitation on sale would not pass on to the buyer.

When applicable, to determine the level of discount to apply the Valuer should consider the impact on the price that a buyer would pay when comparing the Investment in question with an identical



but unrestricted holding. The Valuer may consider using an option pricing model to value the impact of this restriction on Realisation. However, in practice for restrictions that only cover a limited number of reporting periods, this is simplified to a simple mathematical discount to the quoted price. The discount applied should appropriately reflect the time value of money and the enhanced risk arising from the reduced Liquidity. The discount used is a matter of judgement influenced by expected volatility that should reduce to zero at the end of the restriction period.

3.6 (iv) Observable Prices

3.6 (iv) In the absence of an Active Market for financial instruments, but where observable prices are available, the Valuer should consider observable prices in conjunction with estimating Fair Value utilising one or more of the other Valuation Techniques.

In the absence of an Active Market for a financial instrument, the Valuer must estimate Fair Value utilising one or more of the other Valuation Techniques.

Broker Quotes and Pricing Services

It can be common for Funds investing in Debt instruments and other infrequently traded instruments to use third-party sources, such as pricing services and quotes from brokers or dealers, to assist in their Fair Value estimation process. Funds investing in illiquid instruments may also obtain indicative offers from brokers or dealers or other potential buyers.

The use of quoted prices provided by third parties, such as pricing services or brokers and dealers, is permitted if the reporting entity has determined that the quoted prices provided by those parties are developed in accordance with the Fair Value standard. Therefore, reporting entities that use pricing services need to understand how the pricing information is developed and obtain sufficient information to determine where illiquid instruments fall within the Fair Value hierarchy.

Dealer quotes can be binding or non-binding dependent on whether the dealer stands ready and willing to transact at that price. Brokers, on the other hand, report what they see in the market, but usually are not ready and willing to transact at that price.

The Valuer should understand how a quotation or a price provided by a third-party source was determined. It should understand the source of the information, the inputs and assumptions used and whether or not a quote is binding. Prices should be consistent with the Fair Value measurement objective (that is, the price at which an orderly transaction would take place between Market Participants on the Measurement Date).

In assessing the relevance and reliability of information provided by pricing services, the Valuer should consider a number of factors, including the following:

- Whether the price provided is based on recent market information;
- Whether the price provided is based on transactions of similar or identical instruments;
- The extent and nature of the market information on which the price was based; and



- Whether the price provided by the pricing service is representative of a market to which the entity has access.

In assessing the relevance and reliability of broker or dealer quotes, the Valuer should consider a number of factors, including the following:

- Whether the quote is contemporaneous and actionable (that is, binding or not);
- Who at the broker or dealer provided the quote;
- Is the broker or dealer active in assets of the type for which they provided the quote; and
- What disclaimers from the broker or dealer accompany the quote?

3.7 Discounted Cash Flows or Earnings (of Investee Company)

3.7 In using the Discounted Cash Flows or Earnings (of Investee Company) Valuation Technique to estimate the Fair Value of an Investment, the Valuer should:

- i. Derive the Enterprise Value of the company, using reasonable assumptions and estimations of expected future cash flows (or expected future earnings) and the terminal value, and discounting to the present by applying the appropriate risk-adjusted rate that captures the risk inherent in the projections;**
- ii. Adjust the Enterprise Value for surplus or non-operating assets or excess liabilities and other contingencies and relevant factors to derive an Adjusted Enterprise Value for the Investee Company;**
- iii. Deduct from this amount any financial instruments ranking ahead of the highest-ranking instrument of the Fund in a liquidation scenario (e.g. the amount that would be paid) and taking into account the effect of any instrument that may dilute the Fund's Investment to derive the Attributable Enterprise Value; and**
- iv. Apportion the Attributable Enterprise Value appropriately between the relevant financial instruments using the perspective of Market Participants. Judgement is required in assessing a Market Participant perspective.**

This Valuation Technique involves deriving the value of a business by calculating the present value of expected future cash flows (or the present value of expected future earnings, as a surrogate for expected future cash flows). The cash flows and 'terminal value' are those of the Investee Company, not those from the Investment itself.

The Discounted Cash Flows (DCF) technique is flexible in the sense that it can be applied to any stream of cash flows (or earnings). In the context of Private Capital valuation, this flexibility enables the Valuation Technique to be applied in situations that other techniques may be incapable of addressing. While this Valuation Technique may be applied to businesses going through a period of great change, such as a rescue refinancing, turnaround, strategic repositioning, loss making, or is in its start-up phase, there is a significant risk in utilising this Valuation Technique.

The disadvantages of the DCF technique centre around its requirement for detailed cash flow forecasts and the need to estimate the 'terminal value' and an appropriate risk-adjusted discount rate. All of these inputs require substantial subjective judgements to be made, and the derived present value amount is often sensitive to small changes in these inputs.



There is no hierarchy of Valuation Techniques required by accounting standards. However, the use of multiple Valuation Techniques is encouraged. Therefore, while many industry participants believe that DCF-based valuations are open to a high level of subjectivity in selecting inputs for this technique when valuing equity Investments for the Private Capital industry, income-based techniques may be helpful in corroborating Fair Value estimates determined using market-based techniques.

3.8 Discounted Cash Flows (from an Investment)

3.8 In using the Discounted Cash Flows (from an Investment) Valuation Technique to estimate the Fair Value of an Investment, the Valuer should derive the present value of the cash flows from the Investment using reasonable assumptions and estimations of expected future cash flows, the terminal value or maturity amount, date, and the appropriate risk-adjusted rate that captures the risk inherent to the Investment. This Valuation Technique would generally be applied to Debt Investments or Investments with characteristics similar to debt.

This Valuation Technique applies the DCF concept and technique to the expected cash flows from the Investment itself.

Because of its flexibility, this Valuation Technique is capable of being applied to all Private Capital Investment situations. It is particularly suitable for valuing non-equity Investments in instruments such as debt or mezzanine debt, since the value of such instruments derives mainly from instrument-specific cash flows and risks rather than from the value of the Investee Company as a whole.

Risk and the rates of return necessary to compensate for different risk levels are central commercial variables in the making of all Private Capital Investments. Accordingly, there exists a frame of reference against which to develop discount rate assumptions.

Terminal value estimation

The need to make detailed cash flow forecasts over the Investment life (except in circumstances where Realisation is imminent) may, however, reduce the reliability and, crucially for equity Investments, there remains a need to estimate the 'terminal value'.

Where the Investment comprises equity or a combination of equity and other financial instruments, the terminal value would usually be derived from the anticipated value of the Investee Company at Realisation. This will usually necessitate making assumptions about future business performance and developments and stock market and other valuation ratios at the assumed Realisation date. In the case of equity Investments, small changes in these assumptions can materially impact the terminal value. In the case of non-equity instruments, the terminal value will usually be a pre-defined amount, which greatly enhances the reliability of the valuation conclusion.

Based on applicable facts and circumstances, the terminal value should be based upon assumptions of the perpetuity cash flows accruing to the holder of the Investment based on Market Participant assumptions. In some cases, this may be through a steady state growth rate similar to long-term inflation, such as a Gordon Growth Model. In other cases, the terminal value may be more



appropriately estimated using an exit multiple, identifying the expected value upon exit at some point in the future.

Realisation imminent and pricing agreed

Where Realisation of an Investment or a flotation of the Investee Company is imminent, and the pricing of the relevant transaction has been substantially agreed, the Discounted Cash Flows (from the Investment) Valuation Technique (or, as a surrogate, the use of a simple discount to the expected Realisation proceeds or flotation value) is likely to be the most appropriate Valuation Technique.

The implied discount rate at initial investment is adjusted over time for changes in market conditions. In selecting a discount rate, it is important to consider not only the various inputs typically used to estimate the cost of capital, but also the differences between the Investee Company and the selected comparable companies used in estimating the discount rate, which might indicate that a higher or lower cost of capital is appropriate. Calibration provides an indication of how Market Participants would value the Investment as of the transaction date given the differences between the Investee Company and the selected comparable companies. The initial implied yield and assumptions can then be adjusted to take into account changes in the Investee Company and the market between the transaction date and each subsequent Measurement Date.

Valuing Debt Investments

Debt Investments, other than those traded in an active market, are often valued using a Discounted Cash Flow Valuation Technique. At initial investment, inputs to value are compared to observable data where available. For example, at inception the internal rate of return (IRR) for a given Debt Investment can be calculated from the price paid and the expected cash flows. An implied spread for the Investment can be derived by subtracting the risk-free rate from the implied IRR. The spread can be compared to observable spreads for issuances with similar duration and credit quality. At subsequent Measurement Dates, the risk-free rate is adjusted based on market conditions and the spread adjusted based on changes in credit quality and changes in market conditions. Observable transactions, if any, are often used to corroborate the results of the DCF analysis.

Because Fair Value assumes a hypothetical transaction at the Measurement Date, amortised cost is not an appropriate methodology for estimating the Fair Value of a Debt Investment. The fact that a Debt Investment may be held to maturity is not relevant when estimating Fair Value as Fair Value presupposes an exit transaction at each Measurement Date.

When debt is a standalone Investment, a Market Participant would take into account risk, coupon, time to expected repayment, and other market conditions in determining the Fair Value of the Debt Investment, which may not be equivalent to Par Value.

Non-performing collateralised Debt Investments are often valued based on the value of underlying collateral, the risk of converting the collateral into cash, and the time required to convert the collateral into cash. Uncollateralised non-performing Debt Investments or Debt Investments expected to be restructured because the Investee Company is a going concern, are valued based on the most likely cash flows discounted at a Market Participant appropriate discount rate.



3.9 Net Assets

3.9 In using the Net Assets Valuation Technique to estimate the Fair Value of an Investment, the Valuer should:

- i.** Derive an Enterprise Value for the company using the perspective of a Market Participant to value its assets and liabilities (adjusting, if appropriate, for non-operating assets, excess liabilities, and contingent assets and liabilities);
- ii.** Deduct from this amount any financial instruments ranking ahead of the highest-ranking instrument of the Fund in a liquidation scenario (e.g. the amount that would be paid) and taking into account the effect of any instrument that may dilute the Fund's Investment to derive the Attributable Enterprise Value; and
- iii.** Apportion the Attributable Enterprise Value appropriately between the relevant financial instruments using the perspective of potential Market Participants. Judgement is required in assessing a Market Participant perspective.

This Valuation Technique involves deriving the value of a business by reference to the value of its net assets (on a Fair Value basis).

This Valuation Technique is likely to be appropriate for a business whose value derives mainly from the underlying Fair Value of its assets rather than its earnings, such as asset intensive companies and Investment businesses (such as Fund-of-Funds as more fully discussed in section I 4. Valuing Fund Interests).

This Valuation Technique may also be appropriate for a business that is not making an adequate return on assets and for which a greater value can be realised by liquidating the business and selling its assets. In the context of Private Capital, the Net Assets Valuation Technique may therefore be appropriate, in certain circumstances, for valuing Investments in loss-making companies and companies making only marginal levels of profits.

3.10 Calibrating to the Price of a Recent Investment

3.10 The Fair Value indicated by a recent transaction in the Investee Companies equity is used to calibrate inputs used with various valuation methodologies. The Valuer should assess at each Measurement Date whether changes or events subsequent to the relevant transaction would imply a change in the Investment's Fair Value. The Price of a Recent Investment should not be considered a standalone Valuation Technique.

Where the Investment being valued was itself made recently, its cost may provide a good starting point for estimating Fair Value. Where there has been any recent Investment in the Investee Company, the price of that Investment may provide a basis for recalibrating inputs to the valuation model.



Price of Recent Investment is not a default

At each Measurement Date, Fair Value must be estimated using appropriate valuation techniques. The Price of a Recent Investment is not a default that precludes re-estimating Fair Value at each Measurement Date.

Where the price at which a third party has invested is being considered as an input for estimating Fair Value, the background to the transaction must be taken in to account. In particular, the following factors may indicate that the price was not wholly representative of Fair Value at the time:

- different rights attach to the new and existing Investments;
- disproportionate dilution of existing investors arising from a new investor(s);
- a new investor motivated by strategic considerations; or
- the transaction may be considered to be a forced sale or 'rescue package'.

Valuing seed, start-up and early-stage (pre-revenue/pre-earnings) Investments

Many seed, start-up or early-stage Investments are valued using a milestone approach, or scenario analysis (see section II 5.11) because there are no current and no short-term future earnings or positive cash flows. For these Enterprises, typically, it is difficult to gauge the probability and financial impact of the success or failure of development or research activities and to make reliable cash flow forecasts.

Consequently, the most appropriate approach to measure Fair Value may be a Valuation Technique that is based on market data, and Market Participant assumptions as to the potential outcomes. Calibrating such scenarios or milestones may result in a Fair Value equal to the transaction value for a limited period of time. Often qualitative milestones provide a directional indication of the movement of Fair Value.

The following valuation techniques may be helpful in estimating Fair Value:

- scenario-based methods, a forward-looking method that considers one or more possible future scenarios. These methods include simplified scenario analysis and relative value scenario analysis, which tie to the fully-diluted ("post-money") equity value, as well as full scenario analysis, also known as the probability-weighted expected return method (PWERM);
- the option pricing method (OPM), a forward-looking method that considers the current equity value and then allocates that value to the various classes of equity considering a continuous distribution of outcomes, rather than focusing on distinct future scenarios;
- the current value method (CVM), which allocates the equity value to the various equity interests in a business as though the business were to be sold on the Measurement Date; and
- the hybrid method, a hybrid of scenario-based methods and OPM.

Note: See section II 5.11

A scenario-based valuation method, properly calibrated, using industry-specific benchmarks/ milestones that are customarily and routinely used for the specific industry of the Investee Company,



may be applied to estimate Fair Value where appropriate. Assessing the progress towards achieving milestones allows the Valuer to ascertain changes in the probability of various scenarios and the potential outcome of various scenarios. Missing a benchmark/milestone may provide indication of a decrease in value while exceeding a benchmark/milestone may provide evidence of an increase in value depending on the facts and circumstances.

Common milestones / benchmarks

For an Investment in early or development stages, commonly a set of agreed milestones would be established at the time of making the investment decision. These will vary across types of Investment, specific companies and industries, but are likely to include:

Financial measures:

- revenue growth;
- profitability expectations;
- cash burn rate; and
- covenant compliance.

Technical measures:

- phases of development;
- testing cycles;
- patent approvals; and
- regulatory approvals.

Marketing and sales measures:

- customer surveys;
- testing phases;
- market introduction; and
- market share.

In addition, the key market drivers of the Investee Company, as well as the overall economic environment, are relevant to the assessment.

Typical indicators of a change in Fair Value

In applying the milestone analysis methodology, the Valuer attempts to assess whether there is an indication of change in Fair Value based on a consideration of the milestones. This assessment might include considering whether there have been any:

- significant changes in the results of the Investee Company compared to budget plan or milestone;
- changes in expectation that technical milestones will be achieved;
- significant changes in the market for the Investee Company or its products or potential products;



- significant changes in the global economy or the economic environment in which the Investee Company operates;
- significant changes in the observable performance of comparable companies, or in the valuations implied by the overall market; and
- any internal matters such as fraud, commercial disputes, litigation, changes in management or strategy.

Adjustment to Fair Value in such circumstances

If the Valuer concludes that there is an indication that the Fair Value has changed, they must estimate the amount of any adjustment from the last reported Fair Value. By its very nature such adjustment will be subjective. This estimation is likely to be based on objective data from the company, and the experience of the investment professionals and other investors.

However, the necessity and magnitude of the adjustments are relatively subjective and require a large amount of judgement on the part of the Valuer. Where deterioration in value has occurred, the Valuer should reduce the carrying value of the Investment reported at the previous Measurement Date to reflect the estimated decrease.

If there is evidence of value creation, such as those listed above, the Valuer may consider increasing the carrying value of the Investment. Caution must be applied so that positive developments are only valued when they contribute to an increase in value of the Investee Company when viewed by a Market Participant. When considering these more subtle indicators of value enhancement, in the absence of additional financing rounds or profit generation, the Valuer should consider what value a Market Participant would place on these indicators, taking into account the potential outcome and the costs and risks to achieve that outcome.

DCF technique may be useful as a cross-check

In the absence of significant revenues, profits, or positive cash flows, other methods such as the earnings multiple are generally inappropriate. The DCF methodology may be utilised as a cross-check; however, the disadvantages inherent in this methodology, arising from the high levels of subjective judgement, may render the method inappropriate without corroborating support.



4. Valuing Fund Interests

4.1 General

4.1 In measuring the Fair Value of an interest in a Fund the Valuer may base their estimate on their attributable proportion of the reported Fund Net Asset Value (NAV) if NAV is derived from the Fair Value of underlying Investments and is as of the same Measurement Date as that used by the Valuer of the Fund interest, except as follows:

- i.** if the Fund interest is actively traded, Fair Value would be the actively traded price; and
- ii.** if management of the interest in the Fund has made the decision to sell the Fund interest or portion thereof and the interest will be sold for an amount other than NAV, Fair Value would be the expected sales price.

Fund-of-Funds and investors in Private Capital Funds must value their Interest in an underlying Fund at regular intervals to support their financial reporting. Historically, the Net Asset Value ('NAV') based on the underlying Fair Value of Investments held by a Fund, as reported by the Fund Manager, has been used as the basis for estimating the Fair Value of an interest in an underlying Fund. (Note: As stated in Guideline 4.1 (i), if the Fund interest is actively traded, Fair Value would be determined using the actively traded price).

Financial Accounting Standards Board (FASB) ASC Topic 820 (820-10-15-4 & 820-10-35-59 to 62) allows the use of NAV to measure Fair Value if certain conditions are met:

- the Investment is in a Fund (as defined by ASC Topic 946); and
- underlying Investments are reported at Fair Value as of the Measurement Date.

IFRS is silent on the use of NAV and provides no further guidance on how to measure the Fair Value of a Fund interest. Generally, under IFRS, NAV is used as a starting point with the Valuer assessing that reported net assets are valued compliant with Fair Value principles.

Fair Value for a Fund interest (where the Unit of Account is the equity interest in the Fund), at its most basic level, equivalent to the summation of the estimated Fair Value of underlying Investments as if realised on the Measurement Date. The proceeds from such hypothetical Realisations would flow through to the investor in an amount equal to Fair Value less a deduction for incentive payments/ carried interest due to the Fund Manager based on such hypothetical Realisations. Therefore, NAV, when derived as the Fair Value of underlying Investments and adjusted for incentive payments, etc., provides the best indication of the cash flows an investor would receive at the Measurement Date, and thereby a clear indication of the value of the Fund interest. This concept makes particular sense for closed-end Fund investors who realise cash returns on their Investment when Realisation events occur through the sale of the underlying portfolio companies.

As an investor in a Fund, reliance on a reported NAV provided by the investee Fund Manager can only be used by the investor, to determine the Fair Value of the Fund interest, to the extent that the investor has evidence that the reported NAV is appropriately derived from the Fair Value of



underlying Investments taking into account any incentive payments as part of a robust process. Typically, evidence as to a Fund Manager's Fair Value approach, estimation procedures, and consistency of application is gathered via initial due diligence, on-going monitoring, and review of financial reporting and governance of the investee Fund by the investor entity.

Therefore, NAV, when derived from the Fair Value of underlying Fund Investments determined in accordance with the principles of Fair Value and these Valuation Guidelines and adjusted for any incentive payments, provides the best estimate upon which to base the Fair Value of an Interest in a Fund.

4.2 Adjustments to Net Asset Value

4.2 If the Valuer has determined that the reported NAV is an appropriate starting point for determining Fair Value, it may be necessary to make adjustments based on the best available information at the Measurement Date. Although the Valuer may look to the Fund Manager for the mechanics of their Fair Value estimation procedures, the Valuer needs to have appropriate processes and related controls in place to enable the Valuer to assess and understand the valuations received from the Fund Manager. If NAV is not derived from the Fair Value of underlying Investments and / or is not as of the same Measurement Date as that used by the Valuer of the Fund interest, then the Valuer will need to assess whether such differences are significant, resulting in the need to adjust reported NAV.

Factors which might result in an adjustment to the reported NAV would include the following:

- significant time elapsing between the Measurement Date of the Fund NAV and the Valuer entity's Measurement Date. This would be further exacerbated by:
 - the Fund making subsequent Investments or achieving realizations;
 - the Valuer becoming aware of subsequent changes in the Fair Value of underlying investee companies;
 - subsequent market changes or other economic conditions changing to impact the value of the Fund's portfolio;
- information from an orderly Secondary Transaction if sufficient and transparent;
- the appropriate recognition of potential performance fees or carried interest in the Fund NAV;
- waived management fees included in NAV;
- impact of claw back provisions;
- any features of the Fund agreement that may affect distributions, but which are not captured in the NAV;
- materially different valuations by different general partners (GPs) for common companies and identical securities; and
- any other facts and circumstances which might impact underlying Fund value.

NAV should be adjusted such that it is equivalent to the amount of cash that would be received by the holder of the interest in the Fund if all underlying Investee Companies were realised as at the Measurement Date.



4.3 Secondary Transactions

4.3 When a Valuer of an interest knows the relevant terms of a Secondary Transaction in that particular Fund and the transaction is orderly, the Valuer must consider the transaction price as one component of the information used to measure the Fair Value of a Fund Interest.

Limited Secondary Transactions exist for Private Equity Funds. External market transactions for a Fund are typically infrequent, opaque, and information is extremely limited. Secondary prices are negotiated, may be influenced by factors beyond Fair Value and based on assumptions and return expectations that are often unique to the counter-parties. In addition, information relevant to specific transactions may not be deemed orderly and any pricing data available may no longer be current.

In the event that the investor in the Private Capital Fund has decided to sell their interest in that Fund, then data known from orderly Secondary Transaction prices is likely to be better evidence of Fair Value.

Any use of a Secondary Transaction price requires considerable judgement. If orderly Secondary Transaction prices are available, but are not deemed active, then such prices should be augmented with other valuation inputs, generally NAV.

4.4 Other Valuation Approaches for Fund Interests

4.4 When NAV is not or cannot be used as a starting point to estimate the Fair Value of a Fund Interest and market information is not available an income-based Valuation Technique would be used to estimate Fair Value of a Fund Interest.

In situations where a Valuer decides not to use or cannot use NAV as a starting point for determining Fair Value and orderly Secondary Transaction information is not available, the primary Valuation Technique available to estimate Fair Value for a Fund interest would be to perform a discounted cash flow analysis of all future cash flows for the Fund. Given the subjectivity involved, it is not expected that the DCF alternative would be used often in practice.



Section II: Additional Application Guidance

Introduction

Section I sets out the Valuation Guidelines and principles that represent best practice for the valuation of Private Capital Investments. Section II, this section, sets out further practical guidance to the application of those principles and techniques to specific cases.

5. Specific Considerations

5.1 Unit of Account

Background

US and International financial reporting standards require the Fair Value of an asset to be measured consistently with the level of aggregation (Unit of Account) dictated by the accounting standard requiring or permitting its measurement at Fair Value (for example, ASC Topic 946, Investment Companies, in the United States or internationally IFRS 9 and 10, and International Accounting Standard (IAS) 27, 28, and 40). The Unit of Account is a level of aggregation concept that was developed for financial reporting purposes (that is, it addresses the way in which assets and liabilities are to be aggregated or disaggregated in the financial statements).

Because financial reporting is meant to portray economic phenomena, the Unit of Account attempts to describe the specific way that an Investment is owned, including the legal rights and obligations of ownership and its relationship to other ownership rights in a complex capital structure. However, actual transactions may not and do not actually have to take place at the Unit of Account level specified by accounting standards.

ASC Topic 820 and IFRS 13

Fair Value measurement guidance articulated in both ASC Topic 820 and IFRS 13 states: “An entity shall measure the Fair Value of an asset or liability using the assumptions that Market Participants would use when pricing the asset or liability, assuming that Market Participants act in their economic best interest.”³ Neither ASC Topic 820 nor IFRS 13 specify the Unit of Account for assets or liabilities, but rely on other accounting standards to do so.

US GAAP – ASC Topic 946

In US GAAP, ASC Topic 946 specifies that an Investment company must measure its Investments in debt and equity securities at Fair Value. An entity then refers to ASC Topic 820 for Fair Value measurement guidance. In the absence of more specific Unit of Account guidance from ASC Topic 946, entities measure the Fair Value of their debt and equity securities consistently with how Market Participants would act in their economic best interest.

³ IFRS 13 paragraph 22; ASC Topic 820 paragraph 820-10-35-9.



Alternative interpretations of Unit of Account under IFRS

Market Participants generally view the Investment or entire interest to be the Unit of Account with which they would transact. IFRS 10 states that the Fair Value of controlled Investments held by Investment entities should be measured at Fair Value through profit or loss in accordance with IFRS 9. IAS 27 and IAS 28 also permit certain entities to measure their Investments at Fair Value through profit or loss in accordance with IFRS 9. IFRS 9 then refers to IFRS 13 for specific Fair Value measurement guidance. IFRS 9 has been interpreted by some to require the Unit of Account of a financial instrument to be assessed as a single or individual share. Although a single share Unit of Account interpretation applies to actively traded securities (see section I 3.6 of these Valuation Guidelines), there are different interpretations of the Unit of Account for non-actively traded securities:

- One interpretation is that because IFRS 10 and IAS 28 refer to measuring Fair Value in accordance with IFRS 9, the Unit of Account is determined by IFRS 9 and is a single share. However, actual transactions for non-actively traded securities rarely take place on a single share basis.
- Another interpretation is that the Unit of Account is determined by IFRS 10, IAS 27 and IAS 28 as the “Investment”, which is not necessarily a single share. This interpretation more fully matches how Market Participants transact.

The International Accounting Standards Board (IASB) considered amendments to IFRS to clarify these interpretations, but concluded that changes were not needed. Based on these deliberations, it appears that the IASB concurs with industry practice that the Unit of Account would be the entire interest if that is the basis upon which Market Participants would transact. While it is important that a Fund’s auditors agree with Fund management’s conclusion on the Unit of Account, Fund management must take responsibility for the accounting conclusions reached, including the appropriate Unit of Account. If there are any further discussions or decisions by the IASB or the FASB on this issue, these Valuation Guidelines will be updated accordingly.

Consistency with how Market Participants transact

Because Private Capital transactions typically do not happen for individual shares, these Valuation Guidelines do not address how to value a single share of a non-actively traded security. In the absence of Unit of Account guidance to the contrary, these Valuation Guidelines have been prepared with the premise that the Fair Value measurement should be consistent with how Market Participants would transact in their economic best interest.

Examples where the Investment is in multiple securities / tranches

As the Unit of Account concept must be judgmentally applied, in the absence of specific guidance, we offer the following examples to help clarify how such judgements may be reached:

- Some Private Capital managers invest in multiple securities or tranches of the same Investee Company. Unit of Account would be expected to be determined on the same basis that Market Participants (willing buyers and sellers) would enter into an Orderly Transaction. If Market Participants would be expected to purchase all positions in the same underlying Investee



Company simultaneously, then Fair Value would be measured for the aggregate Investment in the Investee Company. If individual tranches of securities would be purchased by Market Participants individually, then the Unit of Account and the basis for determining Fair Value would be the individual tranche.

- If a Fund only holds a debt instrument within an Investee Company's capital structure, the Unit of Account would be the individual debt instrument and the Fair Value of the debt instrument would be measured using the perspective of a Market Participant and would include cash flow (coupon payments), risk, and time to expected principal repayment.
- If a Fund holds both debt and equity Investments in the same Investee Company and Market Participants would transact separately, purchasing a debt position independently from an equity position, then Unit of Account and Fair Value would be measured separately for the debt and equity positions.
- If a potential Market Participant buyer would or could purchase individual shares of an interest in a private company, then the Unit of Account may be a single share. However, generally in the Private Capital industry, Market Participants purchase a meaningful ownership interest in a private company by acquiring more than single private shares.

Value of the entire Enterprise generally the appropriate starting point

Generally, it is appropriate to use the value of an entire Enterprise as a starting point for measuring Fair Value if Market Participants would use such an approach regardless of the accounting Unit of Account. This is because Private Capital investors often invest in-concert with one another and realise value only when the entire Enterprise is sold. Further, Private Capital returns are usually proportionate to the equity position held. Therefore, the hypothetical sale of an Enterprise is a fundamental premise used by Market Participants to determine Fair Value. Common adjustments necessary to allocate Enterprise Value on a Unit of Account basis to measure Fair Value are discussed in these Valuation Guidelines. In situations where a Market Participant would not use Enterprise Value as a starting point; for example if a non-control position is owned and the sale of such a position would not be realised through the sale of the Enterprise, the sale of the individual interest, without the sale of the Enterprise would be considered (see further discussion at section II 5.10). Care should be taken not to mechanically follow the implications of using the sale of an Enterprise as the starting point for Fair Value if there are specific facts and circumstances that would impact value. Examples of such situations are described at section II 5.11.

The above discussion of Unit of Account is for informational purposes and represents the IPEV Board's interpretation of relevant accounting standards in the context of how Market Participants transact in the Private Capital industry. While it is important that a Fund's auditors agree with Fund management's conclusion on the Unit of Account, Fund management must take responsibility for the accounting conclusions reached, including the appropriate Unit of Account.

5.2 Insider Funding Rounds

The price at which a funding round takes place, if considered Fair Value at that date, is used to calibrate valuation inputs. The Valuer should consider whether there are specific circumstances surrounding that round of Investment which may reduce the reliability of the price as an indicator of Fair Value.



Where there is a round of financing that only involves existing investors in the Investee Company in the same proportion to their existing Investments (insider round), the commercial need for the transaction to be undertaken at Fair Value may be diminished. The Valuer needs to assess whether the transaction was appropriately negotiated and reflected the Enterprise Value at that date.

Nevertheless, a financing with existing investors that is priced at a valuation that is lower than the valuation reported at the previous Reporting Date (insider down round) may indicate a decrease in value and should therefore be taken into consideration.

Insider down rounds may take various forms, including a corporate reorganisation, i.e. a significant change in the common equity base of a company such as converting all outstanding preferred shares into common equity, combining outstanding preferred shares into a smaller number of shares (share consolidation), or even cancelling all outstanding shares before a capital increase.

5.3 Distressed Market

Markets from which transaction data may be extracted may be viewed by Valuers to be 'distressed markets'. A distressed market does not mean that all transactions within that market may be deemed to be distressed and invalid for use as comparative purposes; however, an individual transaction may be deemed not orderly. In these situations, significant judgement is needed when determining whether individual transactions are considered orderly and thereby indicative of Fair Value.

When considering whether a transaction may be deemed to be distressed or forced (e.g. not orderly), the Valuer may include such matters as the following indicators in their consideration:

- a legal requirement to transact, for example a regulatory mandate;
- a necessity to dispose of an asset immediately and there is insufficient time to market that asset;
- the existence of a single potential buyer as a result of the legal or time restrictions imposed;
- the seller is in or near bankruptcy or receivership (i.e. the seller is distressed);
- there was not adequate exposure to the market to allow for usual and customary marketing activities; and
- the transaction is considered an outlier by Market Participants when considering other similar transactions of the same or similar asset.

Determining whether a transaction is not orderly or merely reflects current distressed market conditions requires judgement.

5.4 Bridge Financing

Funds, or related vehicles, may grant loans to an Investee Company pending a new round of equity financing (bridge financing). This may be provided in anticipation of an initial Investment by the Fund, or ahead of a proposed follow-on Investment.

In the case of an initial Investment, where the Fund holds no other Investments in the Investee Company, the bridge loan should be valued in isolation. In these situations, and if it is expected that the financing will occur in due course and that the bridge loan is merely ensuring that funds are



made available early, cost may be the best indicator of Fair Value, unless market or company specific conditions exist, which would indicate that Fair Value differs from cost.

If it is anticipated that the company may have difficulty arranging the financing, and that its viability is in doubt, the Valuer should reassess Fair Value.

If the bridge financing is provided to an existing Investee Company in anticipation of a follow-on Investment, the bridge finance should be included, together with the original Investment, as a part of the overall package of Investment being valued to the extent a Market Participant would be expected to combine the overall Investment.

5.5 Debt Investments

Debt Investments take many forms. They can include senior debt, mezzanine loans, shareholder loans, etc. Debt Investments may include a cash pay coupon, payment-in-kind interest (see section II 5.6), and/or equity enhancements, such as warrants.

The Fair Value of Debt Investments should generally be determined on a standalone basis. The price at which the Debt Investment was made or the loan was issued may be a reliable indicator of Fair Value at that date depending on facts and circumstances. However, when combined with features such as warrants, the value of warrants would be disaggregated from the value of the Debt Investment when calibrating the initial yield and Fair Value of the debt and option components.

It should be noted, however, that if debt is a standalone Investment, a Market Participant would take into account risk, coupon, time to expected repayment, and other market conditions in determining the Fair Value of the Debt Investment, which may not be equivalent to face value.

At subsequent Measurement Dates, the Valuer should consider whether any indications of changes in credit risk, positive or negative, would impact Fair Value. The Valuer should also consider whether any indications of changes in required yield based on changes in risk and in market rates of return impact Fair Value.

Depending on the nature of the Debt Investment there may or may not be observable trading activity which provides an indication of value. If trades occur, such information if available should be included in the valuation analysis. There are agencies that regularly quote prices on various Debt Investments; however, transactions cannot always be undertaken at the indicative prices offered. Reported transaction prices should be considered by the Valuer as to whether they represent a reasonable indication of Fair Value. The use of such reported prices is permitted to determine Fair Value if the Valuer has determined how a quotation or a price provided by a third-party source was determined and to what extent it is contemporaneous and actionable. The Valuer should understand what the source of the information was, the inputs and assumptions used, and whether a quote is binding or not.

Since the cash flows and terminal values associated with a Debt Investment may be predicted with a reasonable amount of certainty, typically these Investments are valued on the basis of a DCF calculation.



Warrants attached to mezzanine loans should be considered separately from the loan. The Valuer should select a Valuation Technique appropriate to valuing the Investee Company and apply the percentage ownership that the exercised warrants will confer to that valuation.

In the event that the warrant position is significant, the Valuer may consider utilising one of the sophisticated option and warrant pricing models.

If the Debt Investment is one of a number of Investments held by a Fund in the Investee Company, then the Debt Investment and any attached warrants should be included as a part of the overall package of Investment being valued, to the extent that a Market Participant would combine the Investments.

5.6 Rolled up Loan Interest

Many financial instruments commonly used in Private Capital Investments accumulate interest that is only realised on redemption of the instrument (e.g. deep discount debentures or payment-in-kind notes).

In valuing these instruments, the Valuer should assess the expected present value of the amount to be recovered from these instruments. The consideration of recoverable amount will also include the existence of any reasonably anticipated enhancements such as interest rate step increases.

In a typical financing package, these are inseparable from the underlying equity Investment and will be realised as part of a sale transaction.

The difference between the estimated recoverable amount (if in excess of the original cost) should be spread over the anticipated life of the Debt Investment so as to give a constant rate of return on the instrument.

5.7 Indicative Offers

Indicative offers received recently from a third party for the Investee Company may provide a good indication of Fair Value. This will apply to offers for a part or the whole Investee Company as well as other situations such as price indications for debt or equity refinancing.

However, before using the offer as evidence of Fair Value, the Valuer should consider the motivation of the party in making the offer. Indicative offers may be made deliberately high for such reasons as to open negotiations or gain access to the company, or they may be made subject to stringent conditions or future events.

Similarly, they may be deliberately low if the offeror believes that the vendor may be in a forced sale position, or to take an opportunity to increase their equity stake at the expense of other less liquid stakeholders.

In addition, indicative offers may be made on the basis of insufficient detailed information to be properly valid.



These motivations should be considered by the Valuer; however, it is unlikely that a firm conclusion can be drawn.

Accordingly, indicative offers may provide useful additional support for a valuation estimated by one of the Valuation Techniques, but are generally insufficiently robust to be used in isolation.

Further, Fair Value is based on information which is known or knowable as of the Measurement Date. Therefore, information resulting from a transaction that culminates after the Measurement Date will only be applicable based on the extent the results were known or knowable on the Measurement Date.

5.8 Impacts from Structuring

Frequently the structuring of a Private Capital Investment is complex with groups of stakeholders holding different rights, which either enhance or diminish the value of their interests depending on the success or disappointments of the Investee Company.

Valuations must consider the impact of future changes in the structure of the Investment, which may materially impact the Fair Value. These potential impacts may take several different legal forms and may be initiated at the Fund's option, automatically on certain events taking place, or at the option of another party.

Common clauses include, but are not limited to:

- stock options and warrants;
- anti-dilution clauses;
- ratchet clauses;
- convertible debt instruments;
- liquidation preferences;
- guaranteed IRR; and
- commitments to take up follow-on capital Investments.

These rights should be reviewed on a regular basis to assess whether these are likely to be exercised and the extent of any impact on value of the Fund's Investment. At each Measurement Date, the Valuer should determine whether these rights are likely to be exercised.

In assessing whether rights are likely to be taken up by stakeholders, the Valuer may limit their consideration to a comparison of the value received by the exerciser against the cost of exercising. If the exerciser will receive an enhancement in value by exercising, the Valuer should assume that they will do so.

The estimation of Fair Value should be undertaken on the basis that all rights that are currently exercisable and are likely to be exercised (such as options), or those that occur automatically on certain events taking place (such as liquidation preferences on Realisation, or ratchets based on value), have taken place.



Consideration should also be given to whether the exercise price will result in surplus cash arising in the Investee Company.

Notwithstanding the above, when considering the impact of liquidation preferences, the Valuer should include in their assessment the likelihood of the Fund receiving their full contractual right under the preference. In practice, full value for the preference may not be achieved, particularly when this would result in other investors who are integral to the sale process (such as a continuing management team) receiving a significantly reduced value for their Investment.

5.9 Contractual Rights

Increasingly, additional consideration dependent upon future events is used as a strategy for exiting an Investment. Upon the sale of an Investee Company some consideration is received, with additional consideration potentially being deferred and received in the future. The contractual right to future consideration can be very beneficial, especially for deals encircled with uncertainty; where significant potential value of a business lies in the outcome of future events. The contractual right to future consideration is often described as “contingent consideration.”

Negotiating a contract for future consideration allows sellers to close a deal with the ability to realise a price they think is fair, taking into account future performance they deem both valuable and likely, but that has not yet been achieved. For buyers, the ability to contractually delay paying for value before it fully crystallizes protects their Investment.

Because the interpretation of accounting standards differs and the treatment of so-called “gain contingencies” is not uniform, the Fair Value of contractual rights (gain contingencies) may not have been recorded in a Fund’s financial statements or related notes. However, in the context of a Private Capital Investment, the sale of an Investment that includes potential future consideration is both contractual and qualifies as a financial instrument. Said differently, a contractual right exists. The right itself is not contingent; the future consideration is variable depending on future events and outcomes. In many ways, this is no different than the ownership in an underlying Investee Company; an ownership right exists; the future cash flows that will result from that ownership right are dependent (contingent) upon future events. The same concept applies to warrants or options. The ultimate value is contingent upon future events. To avoid confusion, and misapplication of accounting principles, it is more appropriate to describe “contingent consideration” in its legal form, that being a “contractual right” to future consideration.

Due to the unique aspects of these types of rights, it is likely that an income approach (discounted cash flow) will be the best tool to estimate Fair Value using cash flows which have been appropriately probability weighted for expected outcomes. The expected cash flows are then discounted using an appropriately chosen discount rate. Most likely cash flows, in their simplest form, are determined by assessing the probability and amount of payment at various points in time. Some Market Participants may use other valuation approaches to determine the value of such future cash flows.

Cash flow assumptions should include the estimation of the likelihood and timing of various possible outcomes for achievement of the specified contingency and/or consider scenario-based projections relevant to the specified contingencies. The key starting point is to decompose the factors that



would lead to a contingency being met (or not being met). The Valuer must identify sources of data to be used to support assumptions. It is often possible to keep the analysis relatively simple while still incorporating the material complexities of the contractual right, especially if the probability of success is low or the amount of the future consideration is small. As noted above, even though the interpretation of the proper accounting treatment of contractual rights differs (recognition as an asset in the financial statements versus disclosure in notes to financial statements), Investors generally are in need of a Valuer's estimate of the Fair Value of such contractual rights or contingent gains.

5.10 Non-Control Investments

As noted in Guideline 2.4, Enterprise Value of the Investee Company is generally the starting point for determining Fair Value. This is because investors either have control or have invested together with other investors (and collectively have control) such that value at exit is maximised by the sale of the Enterprise.⁴

In certain limited circumstances, the unit of valuation may not be the overall enterprise. This may be the case where a non-controlling or minority interest is purchased, and the controlling shareholders' interests are not aligned with the non-controlling or minority shareholders. In such limited situations, value may not be maximised through the sale of the Enterprise, and/or the controlling shareholder may have no intent or need to sell the Enterprise.

In such situations, the Market Participant contemplated in the Fair Value determination is the hypothetical buyer for the minority interest, not a hypothetical buyer for the entire Enterprise. If the minority interest would be sold to a Market Participant without the Enterprise being sold, then the Valuation Technique(s) used to determine Fair Value would mirror those of potential Market Participant buyers of the position. In some circumstances, a market approach may be applicable, though in other cases an income approach may be appropriate.

If an income approach (discounted cash flow) is used alone or in combination with a market approach, it would require estimation of future economic benefits and the application of an appropriate discount rate to equate them to a single present value. The future economic benefits to be discounted are generally a stream of periodic cash flows attributable to the asset being valued, but they could also take other forms under specific circumstances—for example, a lump sum payment at a particular time in the future with or without interim cash flows as would be the case where there is a contracted put option in place for the sale of the Investment. Fair Value would represent the amount a Market Participant would pay in an Orderly Transaction for the non-controlling, minority interest.

⁴ For purposes of these Guidelines, control should not be interpreted in the context of accounting consolidation rules. It is the premise of these Guidelines that all Investments made by Investment Entities and Investment Companies are reported at Fair Value. Control in these guidelines is used for purposes of determining which entity or entities have the ability to cause the portfolio company or Investment to be sold at the Measurement Date.



5.11 Mathematical Models / Scenario Analysis

Unlike derivatives and debt markets, mathematical option pricing models have not seen wide usage in the Private Capital marketplace. Such models are rarely used by Market Participants to determine the transaction price for an Investment. However, for certain early stage Investments, option pricing models (OPM) or probability-weighted expected return models (PWERM) are deemed by some to provide a reliable indication of Fair Value where a limited number of discrete outcomes can be expected.

To the extent a Market Participant would determine value of early-stage Enterprises using mathematical models or a scenario analysis, it would be appropriate to consider such Valuation Techniques in determining Fair Value. For example, Enterprise Value could be estimated by assigning probabilities to value increasing (future up round), value remaining the same (flat round), value decreasing (down round), and value eroding (zero return), taking into account anticipated dilution, if any, and then discounting the future funding event to the Measurement Date using an appropriate weighted average cost of capital. The Enterprise Value could then be allocated, again using estimated probabilities, to individual securities using a liquidation or exit approach meaningful for each scenario. It should be noted that selecting inputs for such techniques would be highly subjective.

5.12 Sum of the Parts

Fair Value is determined using Market Participant assumptions. For certain Investments, Fair Value is determined by aggregating the individual Fair Values of portions of the business. This may be the case in situations where an Investee Company has distinct parts where Market Participants would apply different metrics to value each portion. In such circumstances, it may be appropriate to determine the Fair Value of each part and then aggregate the values to determine the overall Fair Value. The Valuer should consider the extent to which overhead costs applicable to the combined portions of the business should be allocated.

5.13 Transaction Costs

Depending on the applicable accounting standards, transaction costs in some cases are required to be capitalised as part of the cost basis of an Investment. However, transaction costs are not considered a characteristic of an asset, and therefore should not be included as a component of an asset's Fair Value.

5.14 Real Estate Investments

A market approach and/or a discounted cash flow methodology is generally used when valuing real estate Investments at Fair Value. The Unit of Account is generally the equity interest in the real estate Investment held. Fair Value is determined by estimating the value of the real property and then subtracting the value of debt that a Market Participant would use in coming to the value of the equity interest.



Certain real estate funds do not report Investments as Investment entities, and thus, do not carry their Investments at Fair Value. For those funds, the entire real property is typically reported as an asset of the Fund, and the mortgage debt is reported as a liability of the Fund. Further, certain funds elect to report the mortgage debt at Fair Value, using the Fair Value option based on applicable accounting standards.

5.15 Infrastructure Investments

An income Valuation Technique is often used to value real estate infrastructure Investments as limited market transaction data is generally available. Guideline 3.8 highlights concepts included when estimating Fair Value using cash flows to the Investment. Some Valuers use terms such as a free cash flow to equity (“FCFE”) or dividend discount model (“DDM”) to describe the discounted cash flow methodology articulated in Guideline 3.8. Market Participant assumptions should be used to select the inputs used in the discounted cash flow model when estimating the Fair Value of infrastructure Investments, as they are with all types of Investments.



Section III – Defined Terms

Definitions

The following definitions shall apply in these Valuation Guidelines.

Active Market

A market in which transactions for an asset take place with sufficient frequency and volume to provide pricing information on an on-going basis.

Actively Traded Investment

A financial instrument traded in an Active Market. The necessary level of trading required to meet these criteria is a matter of judgement.

Adjusted Enterprise Value

The Adjusted Enterprise Value is the Enterprise Value adjusted for factors that a Market Participant would take into account, including but not limited to surplus assets, excess liabilities, contingencies and other relevant factors.

Attributable Enterprise Value

The Attributable Enterprise Value is the Adjusted Enterprise Value attributable to the financial instruments held by the Fund and other financial instruments in the entity that rank alongside or beneath the highest-ranking instrument of the Fund.

Backtesting

The process of using the observed value of an Investment as implied by a sale, liquidity event (e.g. an IPO) or other material change in facts with respect to the Investment, related Investments, or the Enterprise, to assess the Fair Value estimated at an earlier Measurement Date (or Measurement Dates).

Blockage Factor

An adjustment that adds a discount or premia to the quoted price of a security because the normal daily trading volume, on the exchange where the security trades, is not sufficient to absorb the quantity held by the Fund. Blockage Factors are not permitted under US GAAP or IFRS.

Credit Fund

A Private Capital fund that invests in fixed income Investments. A Credit Fund may invest in short-term or long-term bonds, securitised products, instruments or debt.



Debt

Interest-bearing securities that include senior debt, mezzanine loans, shareholder loans, etc. Debt Investments may include a cash pay coupon, payment in kind interest, and/or equity enhancements such as warrants.

Distressed or Forced Transaction

A forced liquidation or distress sale (i.e., a forced transaction) is not an Orderly Transaction and is not determinative of Fair Value. An entity applies judgement in determining whether a particular transaction is distressed or forced.

EBIT

Earnings before interest and tax

EBITA

Earnings before interest, tax, and amortisation

EBITDA

Earnings before interest, tax, depreciation, and amortisation

Enterprise

A commercial company or business financed through debt and equity capital provided by debt holders and owners.

Enterprise Value

The Enterprise Value is the total value of the financial instruments representing ownership interests (equity) in a business entity plus the value of its debt or debt-related liabilities, minus any cash or cash equivalents available to meet those liabilities.

Fair Value

Fair Value is the price that would be received to sell an asset in an Orderly Transaction between Market Participants given current market conditions at the Measurement Date.



Forced Transaction

A Forced Transaction entails the involuntary sale of assets or securities to create liquidity in the event of an uncontrollable or unforeseen situation. Forced selling is normally carried out in reaction to an economic event, personal life change, company regulation, or legal order.

Fund or Private Capital Fund

The Fund or Private Capital Fund is the generic term used in these Valuation Guidelines to refer to any designated pool of Investment capital targeted at all types and stages of Private Capital Investment from start-up to large buyout and including infrastructure and private credit Investment. It includes those pools held by corporate entities, limited partnerships, and other Investment vehicles. Institutional and retail investors provide the capital, which can be used, inter alia, to fund new technology, make acquisitions, expand working capital, and to bolster and solidify a balance sheet.

Fund Manager

The Fund Manager is responsible for implementing a Fund's investing strategy and managing its portfolio trading activities. The Fund Manager is also responsible for providing reporting data to the Fund's investors.

Fund-of-Funds

Fund-of-Funds is the generic term used in these Valuation Guidelines to refer to any designated pool of Investment capital targeted at Investment in underlying Private Capital Funds.

Investee Company

The term Investee Company refers to a single Enterprise or group of Enterprises in which a Fund is invested either directly or through a number of dedicated holding companies.

Investment

An Investment refers to the individual financial instruments held by the Fund in an Investee Company.

Liquidity

A measure of the ease with which an asset may be converted into cash. A highly liquid asset can be easily converted into cash; an illiquid asset may be difficult to convert into cash. Liquidity represents the relative ease and promptness with which an instrument may be sold when desired.



Market Participants

Buyers and sellers in the Principal (or Most Advantageous) Market for the asset that have the following characteristics:

- a. They are independent of each other;
- b. They are knowledgeable;
- c. They are able to transact; and
- d. They are willing to transact, that is, they are motivated but not forced or otherwise compelled to do so.

Marketability

The time required to complete a transaction or sell an Investment. Accounting standards dictate that the Marketability period begins sufficiently in advance of the Measurement Date such that the hypothetical transaction determining Fair Value occurs on the Measurement Date. Therefore, accounting standards do not allow a discount for Marketability when determining Fair Value.

Measurement Date

The date for which the valuation is being prepared, which often equates to the reporting date.

Most Advantageous Market

The market that maximises the amount that would be received to sell an asset after taking into account transaction costs and transportation costs.

Net Asset Value (“NAV”)

NAV of a Fund is the amount estimated as being attributable to the investors in that Fund on the basis of the Fair Value of the underlying Investee Companies and other assets and liabilities.

Orderly Transaction

An Orderly Transaction is a transaction that assumes exposure to the market for a period prior to the Measurement Date to allow for marketing activities that are usual and customary for transactions involving such assets; it is not a Forced Transaction.

Principal Market

The market with the greatest volume and level of activity for the potential sale of an asset.



Private Capital

Investment activity involving early-stage ventures, management buyouts, management buyins, infrastructure, credit, and similar Investments.

Private Equity Fund

A Private Capital fund that invests principally in the equity of private companies, or engages in buyouts of public companies, in order to achieve the delisting of public equity.

Quoted Investment

A Quoted Investment is any financial instrument for which quoted prices reflecting normal market transactions are readily and regularly available from an exchange, dealer, broker, industry group, pricing service, or regulatory agency.

Realisation

Realisation is the sale, redemption, or repayment of an Investment, in whole or in part; or the insolvency of an Investee Company, where no significant return to the Fund is envisaged.

Secondary Transaction

A Secondary Transaction refers to a transaction that occurs when a holder of an unquoted or illiquid interest in a Fund trades their interest to another party.

Unquoted Investment

An Unquoted Investment is any financial instrument other than a Quoted Investment.

Unit of Account

Unit of Account is an accounting term which identifies the level at which an asset is aggregated or disaggregated for Fair Value recognition purposes. Unit of Account is dictated by individual accounting standards that are subject to interpretation. Because Fair Value accounting standards seek to reflect the economic behaviour and the perspective of Market Participants these Valuation Guidelines generally use a Market Participant view in assessing the level of aggregation or disaggregation. For example, where accounting guidance is open to interpretation, if a Market Participant would purchase an entire interest in a private company (not focusing on individual shares) the Unit of Account would be the overall interest purchased. However, if accounting standards clearly define Unit of Account, such guidance should be followed.



Valuation Technique

A Valuation Technique is a generally accepted methodology used to determine the Fair Value of an equity or Debt Investment in an Investee Company. Valuation Techniques include the Income Approach, the Market Approach, and the Replacement Cost Approach. Each of these Valuation Techniques involves methodologies including, but not limited to, pricing multiples of comparable public companies, discounted cash flow analysis, and net assets.

Valuer

The Valuer is the person with direct responsibility for valuing one or more of the Investments of the Fund or Fund-of-Funds.

Venture Capital Fund

A Private Capital Fund that invests in start-up and small- to medium-sized enterprises with strong growth potential. These Investments are generally characterised as high-risk/high-return opportunities.



Appendix 1 – Valuation Guidelines without commentary

Valuation Guidelines

1. The Concept of Fair Value

1.1 Fair Value is the price that would be received to sell an asset in an Orderly Transaction between Market Participants at the Measurement Date.

1.2 A Fair Value measurement assumes that a hypothetical transaction to sell an asset takes place in the Principal Market or in its absence, the Most Advantageous Market for the asset.

1.3 For actively traded (quoted) Investments, available market prices will be the exclusive basis for the measurement of Fair Value for identical instruments.

1.4 For Unquoted Investments, the measurement of Fair Value requires the Valuer to assume the Investment is realised or sold at the Measurement Date whether or not the instrument or the Investee Company is prepared for sale or whether its shareholders intend to sell in the near future.

1.5 Some Funds invest in multiple securities or tranches of the same Investee Company. If a Market Participant would be expected to transact all positions in the same underlying Investee Company simultaneously, for example separate Investments made in series A, series B, and series C, then Fair Value would be estimated for the aggregate Investment in the Investee Company. If a Market Participant would be expected to transact separately, for example purchasing series A independent from series B and series C, or if Debt Investments are purchased independent of equity, then Fair Value would be more appropriately determined for each individual financial instrument.

1.6 Fair Value should be estimated using consistent Valuation Techniques from Measurement Date to Measurement Date unless there is a change in market conditions or Investment-specific factors, which would modify how a Market Participant would determine value. The use of consistent Valuation Techniques for Investments with similar characteristics, industries, and/or geographies would also be expected.

1.7 Unit of Account

1.7 To estimate Fair Value the Unit of Account must be determined. The Unit of Account represents the specific Investment that is being measured at Fair Value.



2. Principles of Valuation

2.1 The Fair Value of each Investment should be assessed at each Measurement Date.

2.2 In estimating Fair Value for an Investment, the Valuer should apply a technique or techniques that is/are appropriate in light of the nature, facts, and circumstances of the Investment and should use reasonable current market data and inputs combined with Market Participant assumptions.

2.3 Fair Value is estimated using the perspective of Market Participants and market conditions at the Measurement Date irrespective of which Valuation Techniques are used.

2.4 Allocating Enterprise Value

2.4 Generally, for Private Capital Investments, Market Participants determine the price they will pay for individual equity instruments using Enterprise Value estimated from a hypothetical sale of the equity which may be determined by considering the sale of the Investee Company, as follows:

- i. Determine the Enterprise Value of the Investee Company using the Valuation Techniques;
- ii. Adjust the Enterprise Value for factors that a Market Participant would take into account such as surplus assets or excess liabilities and other contingencies and relevant factors, to derive an Adjusted Enterprise Value for the Investee Company;
- iii. Deduct from this amount the value, from a Market Participant's perspective, of any financial instruments ranking ahead of the highest-ranking instrument of the Fund in a sale of the Investee Company.
- iv. Take into account the effect of any instrument that may dilute the Fund's Investment to derive the Attributable Enterprise Value;
- v. Apportion the Attributable Enterprise Value between the Investee Company's relevant financial instruments according to their ranking;
- vi. Allocate the amounts derived according to the Fund's holding in each financial instrument, representing their Fair Value.

2.5 Exercising Prudent Judgement

2.5 Because of the uncertainties inherent in estimating Fair Value for Private Capital Investments, care should be applied in exercising judgement and making the necessary estimates. However, the Valuer should be wary of applying excessive caution.



2.6 Calibration

2.6 When the price of the initial Investment in an Investee Company or instrument is deemed Fair Value (which is generally the case if the entry transaction is considered an Orderly Transaction, then the Valuation Techniques that are expected to be used to estimate Fair Value in the future should be evaluated using market inputs as of the date the Investment was made. This process is known as Calibration. Calibration validates that the Valuation Techniques using contemporaneous market inputs will generate Fair Value at inception and therefore that the Valuation Techniques using updated market inputs as of each subsequent Measurement Date will generate Fair Value at each such date.

2.7 Backtesting

2.7 Valuers should seek to understand the substantive differences that legitimately occur between the exit price and the previous Fair Value assessment. This concept is known as Backtesting. Backtesting seeks to articulate:

- i. What information was known or knowable as of the Measurement Date;
- ii. Assess how such information was considered in coming to the most recent Fair Value estimates; and
- iii. Determine whether known or knowable information was properly considered in determining Fair Value given the actual exit price results.

3. Valuation Methods

3.1 General

3.1 (i) In determining the Fair Value of an Investment, the Valuer should use judgement. This includes consideration of those specific terms of the Investment that may impact its Fair Value. In this regard, the Valuer should consider the economic substance of the Investment, which may take precedence over the strict legal form.

3.1 (ii) Where the reporting currency of the Fund is different from the currency in which the Investment is denominated, translation into the reporting currency for reporting purposes should be done using the bid spot exchange rate prevailing at the Measurement Date.

3.2 Apply Judgement in Selecting Valuation Techniques

3.2 The Valuer should exercise their judgement to select the Valuation Technique or techniques most appropriate for a particular Investment.



3.3 Selecting the Appropriate Valuation Technique

3.3 The Valuer should use one or more of the following Valuation Techniques as of each Measurement Date, taking into account Market Participant assumptions as to how Value would be determined:

- A. Market Approach**
 - a.** Multiples (3.4)
 - b.** Industry Valuation Benchmarks (3.5)
 - c.** Available Market Prices (3.6)
- B. Income Approach**
 - a.** Discounted Cash Flows (3.7, 3.8)
- C. Replacement Cost Approach**
 - a.** Net Assets (3.9)

The Price of a Recent Investment, if resulting from an orderly transaction, generally represents Fair Value as of the transaction date. At subsequent Measurement Dates, the Price of a Recent Investment may be an appropriate starting point for estimating Fair Value. However, adequate consideration must be given to the current facts and circumstances, including, but not limited to, changes in the market or changes in the performance of the Investee Company.

Inputs to Valuation Techniques should be calibrated to the Price of a Recent Investment, to the extent appropriate (3.10).

3.4 Multiples

3.4 Depending on the stage of development of an Enterprise, its industry, and its geographic location, Market Participants may apply a multiple of earnings or revenue. In using the multiples Valuation Technique to estimate the Fair Value of an Enterprise, the Valuer should:

- i.** Apply a multiple that is appropriate and reasonable (given the size, risk profile and earnings growth prospects of the underlying company) to the applicable indicator of value (earnings or revenue) of the Investee Company;
- ii.** Adjust the Enterprise Value for surplus or non-operating assets or excess liabilities and other contingencies and relevant factors to derive an Adjusted Enterprise Value for the Investee Company;
- iii.** Deduct from this amount any financial instruments ranking ahead of the highest-ranking instrument of the Fund in a liquidation scenario (e.g. the amount that would be paid) and taking into account the effect of any instrument that may dilute the Fund's Investment to derive the Attributable Enterprise Value;
- iv.** Apportion the Attributable Enterprise Value appropriately between the relevant financial instruments using the perspective of potential Market Participants. Judgement is required in assessing a Market Participant perspective.



3.5 Industry Valuation Benchmarks

3.5 The use of industry benchmarks is only likely to be reliable and therefore appropriate as the main basis of estimating Fair Value in limited situations and is more likely to be useful as a sanity check of values produced using other techniques.

3.6 (i) Quoted Investments

3.6 (i) Instruments quoted on an Active Market should be valued at the price within the bid / ask spread that is most representative of Fair Value on the Measurement Date. The Valuer should consistently use the most representative point estimate in the bid /ask spread.

3.6 (ii/iii) Blockage Factors and Discounts

3.6 (ii) Blockage Factors that reflect size as a characteristic of the reporting entity's holding (specifically, a factor that adjusts the quoted price of an asset because the market's normal daily trading volume is not sufficient to absorb the quantity held by the entity) should not be applied.

3.6 (iii) Discounts may be applied to prices quoted in an Active Market if there is some contractual, governmental, or other legally enforceable restriction attributable to the security, not the holder, resulting in diminished Liquidity of the instrument that would impact the price a Market Participant would pay at the Measurement Date.

3.6 (iv) Observable Prices

3.6 (iv) In the absence of an Active Market for financial instruments, but where observable prices are available, the Valuer should consider observable prices in conjunction with estimating Fair Value utilising one or more of the other Valuation Techniques.

3.7 Discounted Cash Flows or Earnings (of Investee Company)

3.7 In using the Discounted Cash Flows or Earnings (of Investee Company) Valuation Technique to estimate the Fair Value of an Investment, the Valuer should:

- i.** Derive the Enterprise Value of the company, using reasonable assumptions and estimations of expected future cash flows (or expected future earnings) and the terminal value, and discounting to the present by applying the appropriate risk-adjusted rate that captures the risk inherent in the projections;
- ii.** Adjust the Enterprise Value for surplus or non-operating assets or excess liabilities and other contingencies and relevant factors to derive an Adjusted Enterprise Value for the Investee Company;
- iii.** Deduct from this amount any financial instruments ranking ahead of the highest-ranking



instrument of the Fund in a liquidation scenario (e.g. the amount that would be paid) and taking into account the effect of any instrument that may dilute the Fund's Investment to derive the Attributable Enterprise Value; and

- iv. Apportion the Attributable Enterprise Value appropriately between the relevant financial instruments using the perspective of Market Participants. Judgement is required in assessing a Market Participant perspective.

3.8 Discounted Cash Flows (from an Investment)

3.8 In using the Discounted Cash Flows (from an Investment) Valuation Technique to estimate the Fair Value of an Investment, the Valuer should derive the present value of the cash flows from the Investment using reasonable assumptions and estimations of expected future cash flows, the terminal value or maturity amount, date, and the appropriate risk-adjusted rate that captures the risk inherent to the Investment. This Valuation Technique would generally be applied to Debt Investments or Investments with characteristics similar to debt.

3.9 Net Assets

3.9 In using the Net Assets Valuation Technique to estimate the Fair Value of an Investment, the Valuer should:

- i. Derive an Enterprise Value for the company using the perspective of a Market Participant to value its assets and liabilities (adjusting, if appropriate, for non-operating assets, excess liabilities, and contingent assets and liabilities);
- ii. Deduct from this amount any financial instruments ranking ahead of the highest-ranking instrument of the Fund in a liquidation scenario (e.g. the amount that would be paid) and taking into account the effect of any instrument that may dilute the Fund's Investment to derive the Attributable Enterprise Value; and
- iii. Apportion the Attributable Enterprise Value appropriately between the relevant financial instruments using the perspective of potential Market Participants. Judgement is required in assessing a Market Participant perspective.

3.10 Calibrating to the Price of a Recent Investment

3.10 The Fair Value indicated by a recent transaction in the Investee Companies equity is used to calibrate inputs used with various valuation methodologies. The Valuer should assess at each Measurement Date whether changes or events subsequent to the relevant transaction would imply a change in the Investment's Fair Value. The Price of a Recent Investment should not be considered a standalone Valuation Technique.



4. Valuing Fund Interests

4.1 General

4.1 In measuring the Fair Value of an interest in a Fund the Valuer may base their estimate on their attributable proportion of the reported Fund Net Asset Value (NAV) if NAV is derived from the Fair Value of underlying Investments and is as of the same Measurement Date as that used by the Valuer of the Fund interest, except as follows:

- i. if the Fund interest is actively traded, Fair Value would be the actively traded price; and
- ii. if management of the interest in the Fund has made the decision to sell the Fund interest or portion thereof and the interest will be sold for an amount other than NAV, Fair Value would be the expected sales price.

4.2 Adjustments to Net Asset Value

4.2 If the Valuer has determined that the reported NAV is an appropriate starting point for determining Fair Value, it may be necessary to make adjustments based on the best available information at the Measurement Date. Although the Valuer may look to the Fund Manager for the mechanics of their Fair Value estimation procedures, the Valuer needs to have appropriate processes and related controls in place to enable the Valuer to assess and understand the valuations received from the Fund Manager. If NAV is not derived from the Fair Value of underlying Investments and / or is not as of the same Measurement Date as that used by the Valuer of the Fund interest, then the Valuer will need to assess whether such differences are significant, resulting in the need to adjust reported NAV.

4.3 Secondary Transactions

4.3 When a Valuer of an interest knows the relevant terms of a Secondary Transaction in that particular Fund and the transaction is orderly, the Valuer must consider the transaction price as one component of the information used to measure the Fair Value of a Fund Interest.

4.4 Other Valuation Approaches for Fund Interests

4.4 When NAV is not or cannot be used as a starting point to estimate the Fair Value of a Fund Interest and market information is not available an income-based Valuation Technique would be used to estimate Fair Value of a Fund Interest.



Appendix 2 – Additional Information

Financial Reporting Standards

United States and International financial reporting standards (used interchangeably with accounting standards) were amended in 2011 resulting in a common definition of Fair Value and a common approach to measuring Fair Value. Other jurisdictions use a definition of Fair Value which is substantially similar with US GAAP, IFRS, and the definition used in these Valuation Guidelines.

Fair Value is defined by US and International accounting standards 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” (IFRS 13 paragraph 9, ASC Topic 820-10-15-5). These Valuation Guidelines focus on Fair Value measurement from a Private Capital Fund perspective, which generally focuses on underlying portfolio Investments, e.g. assets, and therefore for ease of drafting do not focus on the “or paid to transfer a liability” portion of the accounting definition.

The measurement of Fair Value under US GAAP and IFRS is dictated by ASC Topic 820, Fair Value Measurement as issued by the FASB and IFRS 13, Fair Value Measurement as issued by the IASB. Other accounting standards dictate when Fair Value is required or permitted. In the United States, FASB ASC Topic 946, Investment Companies requires assets of investment companies to be reported at Fair Value. Various IFRS require or permit certain financial instruments to be reported at Fair Value.

On October 31, 2012, the IASB amended IFRS 10, 12, and 27 such that IFRS, under specific circumstances, now requires “control” Investments held by entities meeting the definition of an investment entity to be reported at Fair Value rather than being consolidated at cost.

These Valuation Guidelines are focused on the consistent measurement of Fair Value. Other accounting concepts such as disclosure requirements or day-one gains/losses are beyond the scope of these Valuation Guidelines.

Application of IFRS 9/ASC Topic 946 to Debt Investments

US Generally Accepted Accounting Standards for Investment Companies (ASC Topic 946) require that all Investments, debt and equity, be measured at Fair Value in accordance with ASC Topic 820. International Accounting Standards do not have similar directly applicable guidance for Investment entities. Under International Accounting Standards, IFRS 9 states that all equity Investments should be measured at Fair Value in accordance with IFRS 13.

For Debt Investments, IFRS 9 provides a business model and cash flow test to determine if such Investments should be measured at Fair Value or at amortised cost. As described in the Introduction, Investors in Private Capital Funds almost uniformly require that Net Asset Value be reported on a Fair Value basis consistent with IFRS 13, ASC Topic 820 and these Guidelines. Therefore, Debt Investments should be measured at Fair Value. IFRS may be interpreted to allow flexibility as to



the measurement model, but such flexibility allows Investment Entities to measure their Debt Investments at Fair Value which is in accordance with the needs of their Investors.

Valuation Standards

Global valuation standards continue to evolve. The IPEV Board has entered into an understanding with the International Valuation Standards Council (IVSC) with the objective of promoting consistency between the IPEV Board's Valuation Guidelines and the IVSC International Valuation Standards (IVSs) and to enable these Valuation Guidelines to be positioned as providing sector specific application guidance of the principles in IVS. A valuation of Private Capital Investments prepared in accordance with the IVSs and following these Valuation Guidelines will be consistent with the requirements of applicable financial reporting standards and will also maximise investor's trust and confidence. Further information about the IVSC, the IVSs, and the IVSC Code of Ethical Principles for Professional Valuers is available at <http://www.ivsc.org>.



Appendix 3 – Changes in the 2018 Version of the Guidelines

With respect to the changes made in the 2018 edition of the IPEV Valuation Guidelines, the Board has strived to ensure that the Guidelines continue to be compliant with relevant accounting standards, in particular IFRS 13 and FASB ASC Topic 820. In addition, the Board considered feedback received with respect to potential enhancements. Feedback, combined with the formal consultation responses received, have been incorporated in the 2018 Version of the Guidelines.

The Board has worked to maintain the historical framework of the Guidelines, limiting changes to the extent possible. To be clear, the enhancements in the 2018 edition are meant to instil the following concepts:

1. Fair Value should be estimated at each Measurement Date (each time Fair Value based Net Asset Value (NAV) is reported to investors (LPs).
2. The Price of a Recent Investment (if deemed Fair Value) should be used to calibrate inputs to the valuation model(s).
3. Calibration is required by accounting standards.
4. Market Participant perspectives should be used to estimate Fair Value at each Measurement Date.
5. After considering individual facts and circumstances and applying these Guidelines, it is possible that Fair Value at a subsequent Measurement Date is the same as Fair Value as at a prior Measurement Date. This means that Fair Value may be equal to the Price of a Recent Investment; however, the Price of a Recent Investment is not automatically deemed to be Fair Value.

In one key area, the Board received input from multiple sources that the 2015 (and earlier) versions of the Guidelines were being misinterpreted or misapplied with respect to the use of the Price of a Recent Investment. By describing the Price of a Recent Investment as a Valuation Technique, many users of the Guidelines misinterpreted or misapplied the use of a transaction price such that they did not undertake efforts to estimate Fair Value at subsequent Measurement Dates. Rather, they used the Price of a Recent Investment “blindly” without additional analysis for an extended period of time. Such blind acceptance of the Price of a Recent Investment does not result in a Fair Value measurement consistent with accounting standards.

The Board concluded that the changes made to the 2018 edition of the Guidelines were necessary to help eliminate misunderstanding or misapplication of the Guidelines and to ensure that the Guidelines continue to be compliant with accounting standards and thereby are relevant for investors.

Key Enhancements:

- A. Price of a Recent Investment was removed as a specific Valuation Technique to reinforce the premise that Fair Value must be estimated at each Measurement Date. (Note: The Price of a Recent Investment, if deemed to be Fair Value, is the best estimate of Fair Value as of the date of investment. At subsequent measurement dates, the Price of a Recent Investment will likely be used as a starting point to estimate Fair Value.)



- B. Valuation considerations for early-stage Investments was expanded.
- C. Valuing debt as an Investment was expanded.
- D. For better readability and to eliminate confusion, section I: Valuation Guidelines was moved to appendix 1. Section I of the 2018 edition presents the Valuation Guidelines, boxed and shaded, with explanatory comments. Appendix 1 presents the Valuation Guidelines without explanatory comments.
- E. To prevent misunderstanding and highlight applicability to various types of private Investments in debt and equity by various types of Investment Companies/Entities the term “private equity” was replaced with the term “Private Capital.”

Additional Modifications:

1. Several topics, Financial Reporting Application of IFRS 9/ASC Topic 946 to Debt Investments, and Valuation Standards were moved from the introduction to Appendix 3.
2. Unit of Account added as Guideline 1.7 and additional discussion included in section II Specific Considerations.
3. The Application section of the Introduction was expanded to include a discussion of valuation policy and practices.
4. Minor edits made throughout the document to improve consistency and readability.
5. Certain footnotes removed and added to the main text or eliminated to the extent no longer applicable.
6. Headings conformed and explanatory text moved after the applicable Guidelines.
7. Certain text reordered to improve the logical flow and readability
8. Discussion of debt and dilution added to explanatory text following Guideline 2.4.
9. Additional explanatory comments added following Guideline 3.3 to provide assistance in valuing early-stage Investments.
10. Explanatory text added after new Guideline 3.6(iv) to discuss the use of broker quotes and pricing services information in determining Fair Value.
11. Explanatory text added after Guideline 3.8 with respect to determining the Fair Value of debt when debt is the Investment.
12. Changes to the Valuation Guidelines:
 - a. Each section of the Guidelines was placed at the beginning of the relevant explanatory commentary.
 - b. Guideline 1.4 was amended to more closely align with ASC Topic 820 and IFRS 13.
 - c. Guideline 1.7 added.
 - d. Guideline 2.4 expanded to focus on the Unit of Account.
 - e. Guideline 2.4 (iii) clarifying language added with respect to Market Participant Assumptions; footnote eliminated with concepts added to the explanatory text.
 - f. Guideline 2.4 (iv) added from 2.4 (iii) to improve clarity.
 - g. Guidelines 2.6 footnote removed as Orderly Transaction is a defined term.
 - h. Guideline 3.3 (ii) A Market Approach: Price of Recent Investment removed as a valuation method to help avoid misuse and misunderstanding.
 - i. Former Guideline 3.3, now 3.10 Price of a Recent Investment substantially clarified. The Price of a Recent Investment is used to calibrate valuation inputs, but should not be considered a standalone Valuation Technique.



- j.** Guideline 3.6 (iv). added to describe the use of observable prices in the absence of an Active Market.
 - k.** Footnote following Guideline 4.1 moved to the text to improve readability.
 - l.** Guideline 4.4 added to describe how to value Fund Interests when NAV or Market data is not used or available.
- 13.** Specific Considerations (SC):
- a.** SC 5.1 Unit of Account added text from the document preamble as the first specific consideration to give more prominence to the Unit of Account topic.
 - b.** Former SC 5.3 was deleted as in was deemed redundant with section 2.4 of the Guidelines.
 - c.** SC 5.5 revised and renamed, Debt Investments, to provide explanation on valuing debt when Debt is the Investment.
 - d.** SC 5.13 Transaction Costs added
 - e.** SC 5.14 Real Estate Investments added
 - f.** SC 5.15 Infrastructure Investments added
- 14.** Several additional terms added to section III Defined Terms.



Endorsing Associations

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