International Private Equity and Venture Capital Valuation Guidelines

November 2023

EY

Building a better working world

Preface

- On 21 June 2023, the Securities and Exchange Board of India (SEBI) issued a circular, "Standardized approach to valuation of investment portfolio of Alternate Investments Funds (AIFs)[1]". Thereafter, Indian Venture and Alternate Capital Association (IVCA) officially endorsed the International Private Equity and Venture Capital (IPEV) guidelines[2].
- The IPEV Board had released its most recent guidelines on 14 December 2022 (IPEV Guidelines)[3]. Some of the key concepts under these guidelines have been elaborated in the upcoming slides.

1 Link to circular issued by SEBI
2 Link to IVCA endorsing IPEV guidelines
3 Link to the IPEV Guidelines

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Valuation guidance

IPEVC Guidelines – objectives

Articulate best practices for valuing debt and equity securities

- Consistency of valuation methodology
- Appropriateness of valuation judgements
- Calibrating valuation inputs
- Rigor and thoughtfulness in valuation approach

Suggested governance practice regarding valuations

- Document valuation policy, incorporating IPEVC guidelines
- Document inputs, assumptions, rationales
- Independent internal valuation committee and/or external advisors
- Incorporate back-testing as a component of valuation process

Fair value

Fair value is the price that will be received to sell an asset in an orderly transaction between market participants at the measurement date

- Assumes hypothetical sale in the principal or most advantageous market (irrespective of whether investee Company or Investors intend to sell in the near future)
- Forced transaction or distress sale situation not to be considered
- In case of multiple securities or tranches in the same Investee, evaluate if Market Participant would consider exiting all positions simultaneously. If yes, consider one single unit of account.
- Should incorporate specific restrictions pertaining to the asset, e.g., right of pre-emption, ROFO, Tag/Drag
- Assumes hypothetical transaction commenced at a point of time in advance of measurement date
- Price of recent investment not automatically deemed to be fair value – calibration is required

Valuation Principles

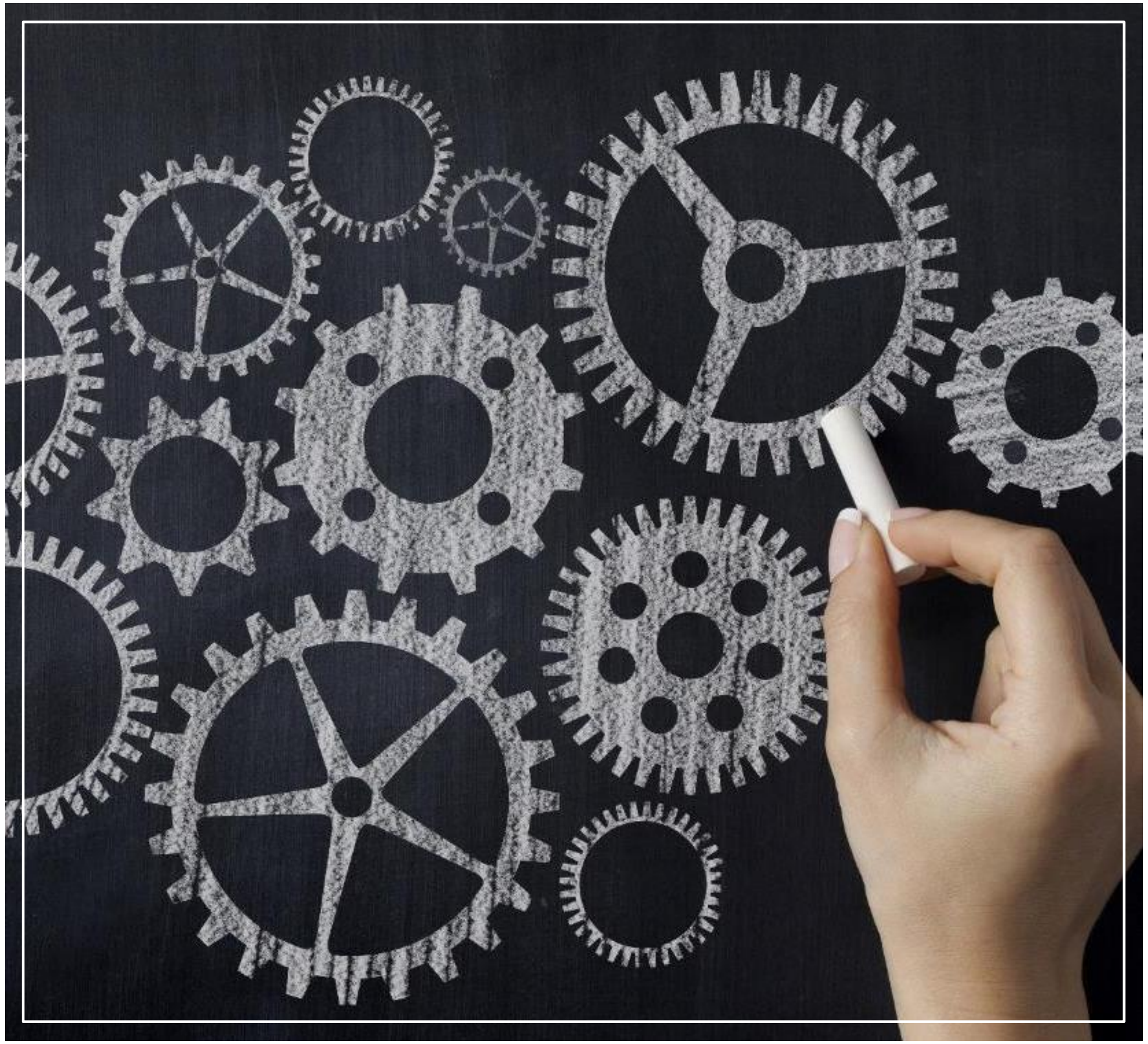
- Economic substance over strict legal form
- Value generally realized through sale/floatation of the entire company. Hence, the value of business provides insights into stake values for equity instruments.
- However, there could be some situations where fair value derived from expected cashflows and risk of relevant financial instruments (instead of overall business value)
  - Minority stake where other owner's interest not aligned
- Maximize techniques that draw heavily on observable market data
  - Market data may require adjustments based on facts/circumstances
  - Adjustments do not automatically reduce reliability
- Results of one technique may be used to cross-check or used in conjunction with other techniques
- Valuation is inherently subjective and depends on
  - Judgement about the company, its markets and environment, including the state of M&A market
  - Stock market conditions and other factors/expectations
- Valuations provide interim indications of progress in investee entities; actual results are determined on exits/realizations

Exercising judgements

- Consider information which is known or knowable
  - Would reasonably be available based on routine enquiry or due diligence
  - Information on performance of investment may be “in-arrears” e.g., September information for December valuation
- Valuer should be wary of applying excessive caution
- Often, the below mentioned situations make it difficult to estimate fair value:
  - Investments made with a view to build, develop, effect change
  - Rescue financing or turnaround
- Valuer needs to conclude the best estimate, even if:
  - Range of fair values is significantly wide
  - Probabilities of each possible estimate cannot be reasonably assessed
  - Probability and impact of achievement of milestone is difficult to predict
- Estimation of an increase of decrease in value may involve references to broad indicators
- Expected transactions post-measurement date may provide indication of fair value
  - Uncertainties about change in price, risk of failure/delay should be considered
  - Proximity may help make judgements on what was knowable

Consistency

- Use consistent valuation techniques over the years unless there are change in market conditions or investment-specific factors
- Change appropriate if it results in measurement which is more representative of fair value
- Basis for change to be documented
- Possible events leading to change could be:
  - Change in stage of development (e.g., pre-revenue to post-revenue)
  - Development of new markets
  - Availability of information
  - Techniques improve
  - Market conditions change
- Investments with similar characteristics, sectors, geographies should have consistent techniques



Methods

- Market approach
  - Multiples
  - Industry Valuation Benchmarks
  - Available Market Prices
- Income Approach
  - DCF
- Replacement Cost Approach
  - NAV
- Price of Recent Investment ("PORI") is a good starting point, but one must consider current facts/circumstances to capture changes until the measurement date. They can be:
  - Market conditions
  - Performance of Investee company
- Inputs to valuation methods calibrated to PORI

Calibrating to the price of recent investment

Calibration at future measurement date

- Calibration is a process applied when the price of initial investment is deemed fair. It says that valuation techniques to estimate fair value in the future should be evaluated using market inputs as on the date of investment. Since contemporaneous market inputs would generate fair value at inception, updated market inputs will generate fair value at future dates as well.

- Example:

Particulars		Original investment date - 1 April 2022	Measurement date - 31 March 2023
Comparable Companies Multiple	A	12.0x	15.0x
Investee Company	B	10.0x (Implied at the time of entry)	**13.0x (if difference expected to remain same)**
Difference	C = A - B	2.0x	2.0x*
Comment		An investment is purchased on 1 April 2022 at an implied EV/EBITDA multiple of 10.0x, while comparable companies were trading at 12.0x multiple.	Multiples of comparable companies have increased to 15.0x as of 31 March 2023. Valuer may conclude that 2.0x difference in the multiple at entry level should be maintained, thereby implying use of 13.0x multiple on updated EBITDA of investee company as on measurement date.

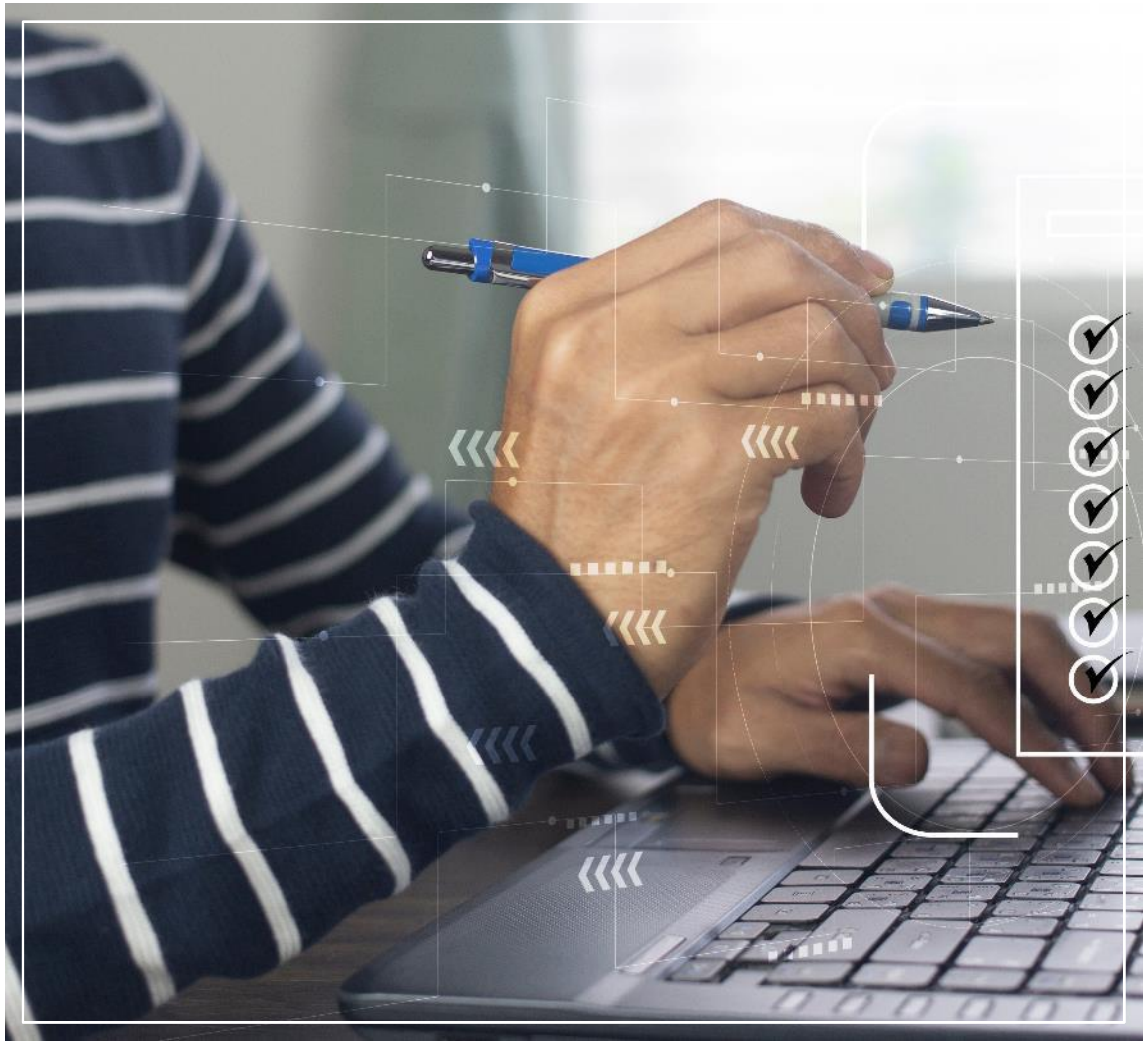
**Valuer has discretion whether an absolute movement or a relative (%) movement would be appropriate.*

- Similar concept can be used with an income approach by using an implied discount rate and deconstructing it into components to provide a basis for company specific risk premium.

Source: IPEV Guidelines & EY Analysis

Backtesting

- IPEV Guidance says that valuers should seek to understand what causes differences between fair value measurements and actual exits by funds.
- Valuers should identify what information was known/knowable as of measurement date and whether it was properly considered in the most recent valuation on measurement date given the actual exit price results/liquidity event (e.g., IPO, sale).
- This tests the rigor of the estimation process and can be used for continuous improvement. It is not used to identify theoretical mistakes, but to provide meaningful insights that can be applied in the future. Over time, it can help assess inherent biases and reliability of assumptions.



Source: IPEV Guidelines & EY Analysis

02

Other considerations

Adjustments to/Allocation from enterprise value to arrive at final value

- Steady-state working capital expected by a buyer
- Higher-ranking claims, such as debt:
  - If debt expected to be repaid on change of control, pay-off value, including pre-payment penalty
  - If debt expected to continue on change of control, market participants negotiated value, considering favorable/unfavorable interest rate terms
- Excess-cash/surplus assets
- Unrecorded liabilities pertaining to incentive compensation, bonus, tax, deferred consideration, pension
- ESG factors such as decommissioning provisions, mandatory contributions, expected legislations
- Dilution due to options and warrants
- Ratchets, liquidation preferences

Insider funding rounds / Bridge financing

1

If existing investors put money broadly in the same proportion as their investments, commercial need for fair valuation diminishes

2

Valuer needs to assess if transaction price was "appropriately negotiated"

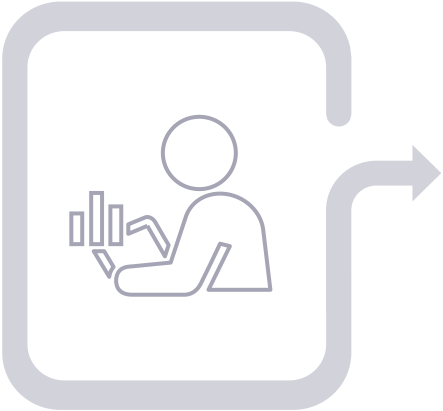
3

Financing from existing investors if priced lower than previous round may indicate a decrease in value.

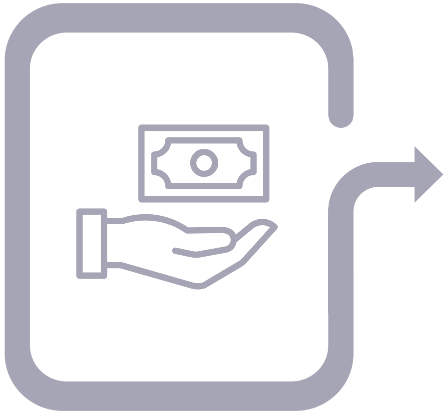
4

In the case of bridge financing to an existing investee in anticipation of follow-on investment, original investment and bridge fund can be considered as part of a "package" and valued on a combined basis

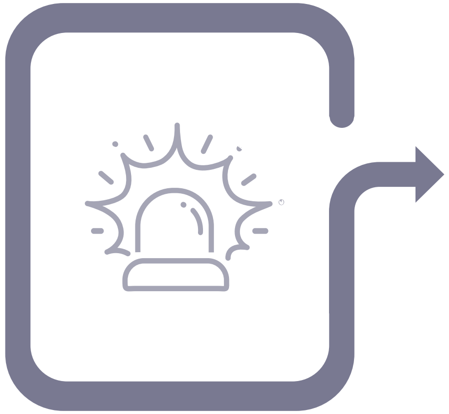
Indicative offers



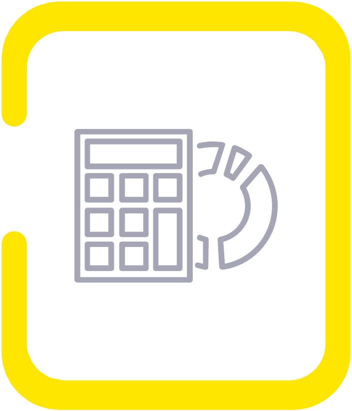
Indicative offers are not observable market prices but represent buyer's starting point for negotiations - some buyers know that price adjustments would be made in diligence.



Offers received recently from a third party may provide a good indicator for fair value. However, valuer should consider motivation of the party, e.g., deliberate high offers to open negotiations/gain access.



Offers may be based on insufficient information or subject to future events/stringent conditions. Hence, these are generally insufficiently robust to be used in isolation as standalone evidence of fair value.



When offer moves to contracting stage, more weight can be placed. Negotiated price for a yet-to-be-closed transaction would be adjusted for uncertainty associated with the pending transaction.

Contractual Restrictions

1 Restriction to not sell listed stock is characteristic of owner and not the asset - hence application of discount will be inconsistent with the unit of account.

2 Funds that cannot sell a listed investment because of contractual sale restrictions still has to consider "price in the principal (or most advantageous market)" - restriction does not change the market in which it would be eventually sold.

3 Discount for lack of marketability (DLOM) was earlier applied for such restrictions [underwriter's lock up or lock-in period]. 2022 IPEV guidance amendment now aligned with recent accounting guidance by Financial Accounting Standards Board's ("FASB") that no discount to be applied in such cases. FASB's decision had dissenting members, so was not unanimous.

4 Amendment consistent with guidance to not apply a discount for blockage factors (size vs. trading volume), since they are characteristic of fund's holding

5 DLOM does apply for government/legal restrictions, which are characteristics of the asset.

ESG

- ESG factors gaining the focus of investors, regulators and governments, and may impact value from qualitative and quantitative perspective.
- Quantitatively observable/measurable considerations include:
  - impact on cashflows from actions (taken/anticipated) such as an alternate source of energy
  - judgement on risk profile/company specific risk premium
  - comparability with peers.
- Qualitative factors with judgmental impact include:
  - location,
  - diversity
  - governmental action
- Risks/opportunities from ESG initiatives/regulatory environment should be included in valuation to the extent that are deemed known or knowable

Governance

- IPEV defers to international valuation standards, but sets expectations
- Investors expect strong control framework
  - Documentation of significant judgements
  - Process to challenge assumptions
  - Right level of seniority
  - Measure effectiveness of reviewer's challenge through back-testing
- Independence
  - Individuals apart from the deal team should be part of the governance process
  - Non-executives and/or external specialists
- Well-thought out and detailed valuation policy should cover
  - Consistency in approach
  - Accuracy and completeness of information
  - Management of conflicts
  - Compliance and effective application

Valuing "fund of funds" – interests in another fund

- Last reported NAV of underlying interest/fund can be the starting point (as long as that NAV considers the fair value of investments)
- If measurement date different, assess if differences could be significant. Adjust for known or knowable changes to get it trued up to measurement date of fund of funds
- Orderly secondary transaction prices become relevant
- If a decision to sell is made, secondary transaction prices provide better evidence
- Appropriate controls/processes need to be in place to assess valuations received from fund manager
- If NAV is not available or cannot be used and secondary market information is not available, use the income approach

03

Leading practices:

complex capital structures / early-stage investments

Differential rights

Complex capital structures

- Funds invest in early-stage companies using a combination of different classes of shares, which could provide unique rights, preferences, etc. Portfolio companies could have a different series of convertible preferred stock with differential rights. Hence, while estimating fair value, one should estimate how each class of share will participate in a sale or liquidity event. Different share classes may be subject to different risk/return expectations and it may be necessary to estimate post-money equity value using a valuation technique.
- Guideline further state that early stage entities may have limited outcomes and the "headline" value (i.e., fully diluted number of shares X price per share of recent round) rarely takes into account inferior rights of junior class of shares. Hence, informed judgement is needed to conclude on fair values between significant financing events.
- Example:

Date of investment	Investors	Amount invested	Stake acquired	Headline value (post-money)	Preferred series
July 2022	Fund A	US$10m	20%	US$50m	Convertible series A
Mar 2023	Fund B	US$20m	20%	US$100m	Convertible series B

- Fund A's stake gets diluted to 16% after investment by Fund B. Fund A valuer needs to apply judgement whether post-money headline value of US$100m is usable or different valuation techniques (e.g., backsolve method) needs to be applied to arrive at value Series A shares.

Source: IPEV Guidelines & EY Analysis

Scenario analysis / option pricing

Seed, start up, early stage, high growth, new age companies, differential rights

- Some of the useful techniques are:
  - Scenario-based methods which include:
    - Simplified scenario analysis
    - Relative value scenario analysis
    - Full scenario analysis or Probability-Weighted Expected Return Method ("PWERM")
  - Option Pricing Method ("OPM") is a forward-looking method that considers current equity value and allocates it to various classes of equity, considering continuous distribution of outcomes rather than future distinct scenarios
  - Current Value Method ("CVM") allocates equity value as though business was to be sold on measurement date
  - Hybrid method which is a combination of scenario-based method and OPM.

Simplified scenario analysis

Particulars	Probability
High Value exit – IPO / strategic sale	80%
Low exit - Liquidation Preference to impact value	20%

Relative value scenario analysis

Particulars	Probability	Common equity	Series A	Series B
		Discount to latest round		
High Value exit – IPO/ strategic sale	60%	0%	0%	0%
Low exit - Liquidation Preference to impact value	40%	20%	10%	0%

- These techniques require initial calibration to transaction value on investment date and recalibration for additional rounds.
- Assessing progress towards milestones allows valuer to ascertain changes in the probability of various scenarios and the potential outcome of various scenarios.

Source: IPEV Guidelines & EY Analysis

Scenario analysis / option pricing

Seed, start up, early stage, high growth, new age companies, differential rights

- Practices have evolved in certain jurisdiction to place more weight on hybrid or OPM method in early stages of investment when likely exit will be dependent upon another round of financing. As one nears an exit possibility through IPO or M&A, more weight is given to a fully diluted approach.
- American Institute of Certified Public Accountants ("AICPA")'s PE/VC taskforce has also issued an accounting and valuation guide for valuation of portfolio company investments of venture capital/private equity funds, which is broadly in line with IPEV guidelines.

Source: IPEV Guidelines, AICPA's Accounting and Valuation Guide & EY Analysis

Indicative milestones

Financial measures

- Revenue growth
- Profitability expectations
- Cash burn rate
- Covenant compliance

Technical measures

- Phase of development
- Testing cycles
- Patent/regulatory approvals

Marketing and sales measures

- Testing phase
- Market introduction
- Market share

Example 1 – Simple capital structure

- Fair value of the fund's interest = pro rata share of total equity value
- All investors have the same class of securities and:
  - Do not require more complex models, such as OPM or scenario analysis
  - They typically enter together and exit together investor interests are aligned
- When the company is ultimately sold or goes public, all investors will receive a pro rata share of the value that is realized

Example 2 – VC investment, bimodal outcomes or high probability of conversion

- Initial investment = preferred stock with a 1x LP, generally convertible to common shares at a 1:1 ratio
- As time passes, new rounds of financing are raised:
  - "Upround" typically 1x LP at higher price, pari passu with earlier rounds
  - "Downround" may have additional features to minimize dilution
- Historical approach – use the fully diluted equity value and allocate that value to the investor interests on an as-converted basis
  - Rationale: investors will realize value only through a sale of the company or an IPO and as a result, their focus is on the company's upside, where shares will convert
- When is this approach reasonable?
  - If market participants would assume that the preferred is sure to convert at the liquidity event, or if the company is at such an early stage, the outcome is likely to be bimodal, then using a fully diluted approach would be a reasonable approximation

Example 3 – Participating preferred

- Participating preferred securities share in the upside on an as-converted basis without having to forego their liquidation preference
  - First repay the LP for each participating preferred class
  - Allocate the remaining equity value to all classes on an as-converted basis
- If the investors in aggregate have control and hold the senior securities, allocate controlling equity value using Current Value Method (CVM)
  - Value of investor securities cannot be any less than what the investors could realize by selling the company on the measurement date
- If the investors do not have control, the junior securities will benefit from allowing more time for the business value to appreciate
  - CVM and fully diluted value are generally not appropriate in this situation

Example 4 – Downside scenario has value

- Liquidation preferences matter when there is value on the downside, for example:
  - PE-backed companies (e.g., LBO, turn-arounds, corporate carve-outs)
  - Later stage VC-backed companies
- Frequently, more established companies have only one class of investor securities, since a large investment is required in the initial acquisition:
  - In these cases, considering a CVM is usually reasonable, since investors could sell the company if it were to their advantage to do so
- If there are multiple classes of securities, it is important to capture the differences in value, i.e.,:
  - Use a forward-looking method such as scenario analysis, OPM or a hybrid method, or treat each class as a debt-like preferred plus common
  - Capture the effect of the LPs considering the downside protection

Does it really matter?

- **"Is anyone really using scenario analysis or OPM?"**
  - Yes – when it is important to consider the rights and preferences of the various securities in the valuation.
  - The impact on the fund's aggregate investment in the portfolio company depends on how different the rights are between the rounds, and the mix of shares held.
- **"We tried using OPM, but the answers did not make any sense"**
  - Many firms negotiate the price for the round using a fully diluted value, which assumes all the classes of equity have the same value (even common).
  - OPM gives full credit to the value of liquidation preferences on the downside, assuming that the various classes of equity are different. So OPM uses a lower total equity value. This lower equity value reflects the illiquidity of the investments and the negotiation dynamics that give new rounds preferences relative to previous rounds.
  - Investors demand and may achieve high rates of return in part due to the illiquidity of private company investments, so the equity value used in OPM, or scenario analysis, will reflect these high rates of return.
  - The answers make more sense in situations where the equity value is likely to evolve smoothly rather than jumping, as long as you start with an equity value that is consistent with the allocation methodology (consistent with the latest round)

Red flags on using post-money value

- **"Fake" flat round**
  - New round has the same price as the previous round, but has superior features
- **Seniority, greater than 1x liquidation preference**
  - If the new investors care about seniority or negotiate for greater than 1x LP,
    chances are the downside protection matters to them
- **Warrant coverage, greater than 1x conversion**
  - If the new investors have greater than 1x conversion or warrant coverage, then the effective price per share is lower than it would appear
- **Investor interests not aligned**
  - In an upround, if the new round has control, those investors might favor a sale
  - If the rounds with lower liquidation preferences have control, they might favor waiting for an IPO or holding out for a high value exit
  - Even in a simple capital structure, tensions may exist if the investors include funds with different time horizons

Other common pitfalls

- Using a fully diluted approach even when the company is at a point where a low value exit would provide a partial return to the senior securities
- Using a fully diluted approach even when preferred is participating or converts at other than 1x
- Failing to calibrate under the following circumstances:
  - Using a median or average multiple without considering differences between company and comparables
  - Using a control premium or marketability discount without assessing the negotiation dynamics
  - Using an immediate waterfall in an early-stage company, assuming the investors get back a significant percentage of their investment
  - Using a waterfall method, even when there is a significant time to exit, and junior securities control the timing of exit
  - Using a median volatility without considering differences in leverage or size/diversification.

Issues with using the OPM backsolve method when the latest round is senior

- Example: Series C financing closed near the valuation date.
  - The price per share will be an observed result from the allocation method
  - Can solve for the implied company value that reconciles to the Series C price
- When a recent transaction exists, it should be considered.
  - To the extent that the transaction value isn't representative of fair market value, consider adjustments to the transaction price and/or other methods.
- Angel rounds (first round of investment) or new rounds that are senior may result in an unrealistically low implied company value.
  - OPM may overstate the value of senior liquidation preferences and understate the value of junior liquidation preferences, since it assumes that the distribution of outcomes is log normal and the waterfall will be strictly followed. In practice, the investors who in aggregate have control of the business will choose the timing of exit when it is advantageous for them, rather than exiting to preserve value for the senior preferred if the senior preferred do not have control.
  - If you solve for the value assuming all preferred securities are pari passu and the implied equity value changes significantly, consider whether the pricing included a negotiation discount or estimate the equity value using a different methodology.

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