Valuation techniques for private equity

Breakfast session 1: an introduction to the IPEV Guidelines

18 September 2014
Agenda

9.00 a.m. An introduction to the IPEV Guidelines - Presentation

10.30 a.m. Networking coffee
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1. The Concept of Fair Value
2. Principles of Valuation
3. Valuation Methods
4. Valuing Fund Interests
5. Specific Considerations
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1. The Concept of Fair Value

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The International Private Equity and Venture Capital Valuation (‘IPEV’) guidelines set out best practice where private equity investments are reported at FV to help investors in PE Funds making better economic decisions.

In case of conflicts between IPEV guidelines and requirements of any applicable laws or regulations or accounting standards, the latter should take preference.

Investments are reported at Fair Value:

- To promote best practice
- To help investors make better economic decisions
- To address the increasing importance placed by international accounting authorities on Fair Value.
Introduction

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1. The concept of Fair Value

- Preliminary note: A distinction is made between an accounting principle (here Fair Value) and a valuation technique (ex: earnings multiple technique)
- “Fair Value is the price that would be received to sell an asset in an orderly transaction between market participants at the measurement date”
- Objective is to “estimate the price at which hypothetical transaction would take place on the principal market transact”
- For quoted investments, available market price will be the exclusive basis
- For unquoted, it does not assume that the business is saleable at reporting date nor that the shareholders have an intention to sell, but that the investment is sold at the measurement date and in the current market conditions
- Discount for marketability is not appropriate and liquidity is taken into account by market participants
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2. Principles of Valuation

Key Principles of Valuation

- Private Equity context: FV must be estimated in the absence of an active market.
- Estimation made by applying a technique that is appropriate in light of the nature, facts and circumstances of the investment in the context of the total investment portfolio and should use reasonable current market data and inputs combined with market participants assumptions.
- Fair Value is estimated using the perspective of Market participants and market conditions at the measurement date inspective of which valuation techniques are used.
2. Principles of Valuation

Valuation Steps

1. Determine Enterprise of the Investee company Value using one of the valuation techniques
2. Adjust the Enterprise Value for factors that a market participant would take into account such as surplus assets or excess/unrecorded liabilities
3. Deduct from this amount any financial instrument ranking ahead of the highest ranking instrument of the Fund in a sale of the enterprise and taking into account the effect of financial instrument diluting the Fund’s investment
4. Apportion the Value between the relevant financial instruments
5. Allocate the amount according to the Fund’s holding in each financial instrument
Because of uncertainties inherent in estimating Fair Value, a degree of caution should be applied to judgments and estimates. However, the valuer should wary applying excessive caution.

In situations where Fair Value cannot be reliably measured, report the investment at carrying value (unless evidence of an impairment).

Concept integrated in 2012

Assume that entry price is Fair Value

Enable to validate at acquisition date valuation techniques to be used in the future.
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General

- Use judgment in determining Fair Value
- Consider specific terms of the investment
- Consider substance more than strict legal form
- Where investment currency differs from reporting currency, use bid spot exchange rate
3. Valuation methods

Selection of the Technique

- Exercise judgment
- Consider factors such as:
  - Applicability of methodologies given industry nature and market conditions
  - Quality and reliability of data used in each methodology
  - Comparability of enterprise or transaction data
  - Stage of development of the enterprise
  - Result of calibration
- Maximise the use of technique that draw easily on observable market-based measures of risk and return
- If several methodologies are appropriate, use one as a cross-check of the other
3. Valuation methods

- Apply methodologies consistently from period to period (except where a change becomes appropriate to adapt to a change in the investee company’s situation – the new method is deemed to replace the previous one in future valuations)

- Most common methodologies:
  - Price of recent investment
  - Multiples
  - Net assets
  - Discounted cash flows (DCF)
  - Industry valuation benchmarks

- DCF and industry benchmarks should not be used in isolation

Selection of the Technique
3. Valuation methods

- Price of a recent investment provides a basis for valuation
- Applicable to investment itself as its cost provides a good indication of Fair Value
- Validity is eroded over time and depends on the circumstances (e.g. nature and maturity of investment).
- Transaction must be significant, made between knowledgeable willing third parties
- Often appropriate for early stage enterprises, enterprises with insignificant revenues
- Transaction costs to be excluded
3. Valuation methods

- Consider background of the transaction as some factors may indicate that the price is not wholly representative of Fair Value
  - Additional insignificant investment by existing shareholders
  - Different rights attached to the existing and new investment
  - New investors motivated by strategic considerations
  - Forced sale or rescue package
  - Absolute amount is relatively insignificant
- Always assess whether changes or subsequent events would imply a change in Fair Value
3. Valuation methods

Price of Recent Investment

Pitfalls and difficulties

► Transaction is not significant enough > buy back of shares from a retired manager of the company
► Transaction is not made between third parties and at arm’s length conditions > sale between affiliated companies
► Non-cash transaction > in group restructurings, where the objective is not to invest more money or is not to exit from the company
► Strategic interest-based transaction > Blue chips software companies buy start-ups to acquire their know-how, highly qualified staff, patents, licenses etc. They are not driven by a financial interest
3. Valuation methods

Valuation of venture capital investments – Milestones Approach

- PROFIT FROM
  - NEW INVESTMENT ROUND
  - WITH EXTERNAL INVESTOR(S)
  - EARNINGS OR REVENUE

- MILESTONE NOT MET OR
  MAJOR DELAY IN EXECUTION

- A milestone is a scheduled event signifying the completion of a major deliverable or a set of related deliverables.

- Milestones are used as high-level snapshots for management to validate the progress of the project.
3. Valuation methods

Valuation of venture capital investments – Milestones approach
Practical example

► Events like capital injections are often triggered to the completion of certain milestones.

► Clinical trials:
  ► In Phase I trials, researchers test an experimental drug or treatment in a small group of people (20-80) for the first time to evaluate its safety, determine a safe dosage range, and identify side effects.
  ► In Phase II trials, the experimental study drug or treatment is given to a larger group of people (100-300) to see if it is effective and to further evaluate its safety.
  ► In Phase III trials, the experimental study drug or treatment is given to large groups of people (1,000-3,000) to confirm its effectiveness, monitor side effects, compare it to commonly used treatments, and collect information that will allow the experimental drug or treatment to be used safely.
  ► In Phase IV trials, post marketing studies delineate additional information including the drug's risks, benefits, and optimal use.
3. Valuation methods

► Application of a multiple to the earnings of the business
► Appropriate for investment in established businesses with identifiable streams of continuing (maintainable) earnings
► Applicable to companies with negative earnings if losses are temporary and if normalised earnings may be identifiable (use of average earnings)
3. Valuation methods

“Apply a multiple that is appropriate and reasonable indicator of value to the maintainable earnings of the company”

- Appropriate multiple:
  - Most commonly used multiple: P/E, EV/EBIT, EV/EBITDA
  - Correlations of periods and concept of earnings
  - For P/E multiple to be comparable, the two entities should have similar financing structures

- Maintainable earnings:
  - Ensure reasonableness of estimate
  - Consider historical, current, forecast earnings (trade-off between reliability and relevance)
  - Adjust for exceptional or non-recurring items
  - Adjust for impact of discontinued activities, acquisitions, forecast downturns in profits
3. Valuation methods

- Reasonable multiple:
  - Derive multiple from current market-based multiples
  - Calibration
    - Identify companies that are similar in terms of:
      - Risk attributes
      - Earnings growth prospects
      - Nature of operations
      - Market and competitive position
3. Valuation methods

Reasonable multiple:

► Consider adjustment of each comparable multiple for points of difference between the comparable company and the company being valued.

► Exemple of factors to take into account:
  ► Smaller and less diverse than comparative company
  ► Reliant on small number of key employees
  ► Dependent on 1 product or 1 customer
  ► Higher gearing
  ► Poor quality of earnings
3. Valuation methods

Pitfalls and difficulties

► Use of too large basket of comparable companies that does not sufficiently reflect the risk profile of the portfolio company. Select a smaller basket (5-8) with companies as close as possible in terms of activities, markets, clients, size & geography and then adjusted multiples for remaining significant differences between portfolio companies and basket companies (reduce multiple of a basket company to reflect a more diversified client base)

► Recent transaction transparency
3. Valuation methods

Derive the value of a business by reference to the value of its net assets

- Appropriate for businesses whose value derives mainly from underlying assets and not from earnings (property holdings, investment business, funds of funds)
- For businesses not making adequate returns and for which greater value can be realised through liquidation
- Consider ‘adjusted net assets’ rather than book value
3. Valuation methods

- **Discounted Cash Flow From a Business**

  - Derive the value of a business by calculating the present value of expected future cash flows
  - Flexible method that can be applied to any stream of cash flows
  - Applicable in situations that other methodologies may be incapable of addressing
3. Valuation methods

Discounted Cash Flow From a Business

Pitfalls and difficulties

► Risky method when applied to period of great change (rescue financing, strategic repositioning, loss making, start-up phase)

► Requirement for detailed cash flow forecasts

► Need to estimate terminal value

► Difficulty to determine an appropriate risk-adjusted discount rate

► Many substantial subjective judgments

► Too optimistic cash flows.

► Inappropriate discount rate (easily too low). Determine a realistic market premium (CAPM) based on long term statistics, adapt Beta derived from quoted companies to reflect the more risky profile of unquoted companies.

► Do not forget to discount back the computed terminal value.
3. Valuation methods

- Used in certain industries such as cable television (price per subscriber), nursing-home operators (price per bed)
- Appropriate for businesses in industries where normal profitability does not vary much
- Only likely to be appropriate in isolation in limited situations. Should be used as a cross-check
3. Valuation methods

Available Market Prices

► Applicable for quoted investments for which a market price coming from an active market is available
► Blockage factors are not allowed
► Apply marketability discounts in situations where:
  ► there are formal restrictions on trading
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4. Valuing Funds interest

- Actively traded Funds
- NAV
- Secondary transaction
- Discounted cash flows
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5. Specific consideration

- Internal funding rounds
- Bridge financing
- Rolled up loans
- Indicative offers
- Mezzanine loans
5. Specific consideration

Valuators should consider whether reported prices of transactions on mezzanine are reasonable indications of fair value.

Even if some agencies regularly quote prices of mezzanine loans, significant judgment is needed when determining whether individual transactions are indicative of fair value.

Mezzanine loans should typically be valued on the basis of a DCF valuation as cash flows associated with the loan may be predicted.

Reported transactions need to be orderly: discounts that may not be representative of fair value may have been granted in case of forced sale.

Differentiate situation where the PE Fund controls the debt or not.

Challenge: How to implement this in practice?
5. Specific consideration

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<th>Measurement date</th>
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<td>Decrease higher then Equity Value at acquisition date</td>
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5. Specific consideration

<table>
<thead>
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<th>Acquisition date</th>
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<tr>
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<td>Increase higher than the Equity Value at acquisition date</td>
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</table>
5. Specific consideration

Waterfall approach imply to deduct the value of the debt to assess the value of the Equity:
2 options:
1. Repayment of debt if change of control
2. No repayment of debt if change in control

Face value = FV
FV to be estimated

Acquisition date

Measurement date

EV

Equity

Debt

N
5. Specific consideration

- In practice: A mix of 3 approaches, each of them having its own limits:
  - DCF:
    - Limit: Discount rate: Assessment of the risk premium? Cap to a discount in LBO transaction?

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<tr>
<td>Cash Interest</td>
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<td>25 600</td>
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</table>

Fair Value as of 31 Dec 2014 | 611 975
5. Specific consideration

► Broker quotes/transaction prices
  ► Limits:
    ► If transaction, visibility on the « arm’s length basis »?
    ► If quote, derived from credible offer or not?
    ► Are different broker quotes available for the same asset?

► Impairment analysis
  ► Limits:
    ► Accuracy and completeness of impairment factors
    ► Covenant compliance
    ► Operational performance
    ► Leverage level
    ► Financial support
    ► Liquidity
Contacts

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Thank you