Advanced Corporate Finance

Lorenzo Parrini
Introduction

Course structure

Course structure
3 credits – 24 h – 6 lessons

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<td>Corporate valuation</td>
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Lesson 2 Corporate Valuation
Lesson 2 Summary

1. Introduction to Corporate Valuation
2. Valuation Methods
3. EVA
4. M&A most used methods: DCF and Multiple methods
5. Methods adjustments
6. From value to price
7. Valuation in particular contexts
Should I sell some assets?

How is performing my business(es)?

Should I acquire my competitor?

Should I invest in a new business?

How much is it worth? Why? Depending on what? When? How is it calculated? Are there different perspectives? Do others look at it differently?
Corporate valuation is the combination of principles, methods and procedures that allow to measure the value of a company, that reflects determined peculiarities universally recognized.

**Valuation Features**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>Do not include any contingent effect of demand and offer or the involved players features</td>
</tr>
<tr>
<td>Objective</td>
<td>Appropriate demonstrability and objectivity of hypothesis at the base of the chosen valuation method</td>
</tr>
<tr>
<td>Rational</td>
<td>Value construction through a logical scheme</td>
</tr>
<tr>
<td>Stable</td>
<td>Exclusion of elements related to extraordinary events</td>
</tr>
</tbody>
</table>
Introduction to Corporate Valuation

Valuation contexts

- **Corporate**
  - Shareholders withdrawal or entrance
  - Minority shareholders protection
  - Legal evaluation ex art. 2465 CC

- **Development and turnaround strategies**
  - M&A deals
  - Initial Public Offer
  - Turnaround operations

- **Balance sheet production**
  - IAS-IFRS accounting principles
  - Impairment
  - Valuation of goodwill, intangibles

- **Periodical evaluations**
  - This kind of valuation meets the necessity of valuing managers results and supplying strategic and operating guides.
Introduction to Corporate Valuation

Players involved

Knowing the current value of a Company is an essential item for all the players involved in companies life cycle.

- Shareholders
- Banks
- Managers
- Analysts and Advisors
- Investors

It assumes a significant importance in M&A transactions.
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Valuation Methods

Methods Overview

Methods

- Direct
  - Asset based Method
    - Simple
    - Complex
  - Cash flow Method
  - Combined method
    - With autonomous estimate of goodwill
    - EVA
- Indirect
  - Market multiple
    - Peer market multiples
    - Transaction multiples
## Valuation Methods
### Methods Overview

<table>
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<tr>
<th>Main Methods</th>
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</thead>
<tbody>
<tr>
<td><strong>Cash flow method</strong></td>
</tr>
<tr>
<td>These criteria consider the value of a company due to its capabilities to generate cash flows in the future. On the basis of the kind of cash flows used cash flow method has two variations:</td>
</tr>
<tr>
<td>✓ <strong>Financial Method (DCF):</strong> the economic value of the business is equal to the sum of the present value of the cash flow that the company will be able to generate in future, as discounted at the rate of return on risk capital or the weighted average cost of capital, depending on the cash flow method used: <strong>levered (equity side) or unlevered (asset side)</strong></td>
</tr>
<tr>
<td>✓ <strong>Income based method:</strong> this approach determines the value of the business based on revenues and costs for the period. The economic value is equal to the sum of the forecast flow of normal profits (over a limited period or an unlimited period) as discounted at the rate of return on risk capital or the weighted average cost of capital depending on the method used: <strong>levered (equity side) or unlevered (asset side)</strong></td>
</tr>
<tr>
<td><strong>Multiples method</strong></td>
</tr>
<tr>
<td>✓ <strong>Peer market multiples:</strong> this approach estimates the economic capital of a business based on the prices traded on organized markets for securities representing interests in comparable companies.</td>
</tr>
<tr>
<td>✓ <strong>Transaction multiples:</strong> this method allocates a business the value identified from transactions that have taken place in relation to controlling interests in comparable businesses.</td>
</tr>
</tbody>
</table>
### Main Methods

#### Asset based method

Asset based methods are based on the assumption that a rational investor will not value an existing asset at more than its replacement cost (or reproduction cost). These criteria do not make explicit consideration of matters regarding the business ability to generate profit.

Asset based method declines in two variations:

- **Simple**: this approach considers the current value of tangible assets (NAV) to ascertain the effective net capital of the business
- **Complex**: this approach considers, in addition to current value of tangible assets, the current value of intangible assets even those not included in the balance sheet

#### Combined methods

Combined criteria are based on the hypothesis that the value of an asset depends both on its replacement cost (or reproduction cost) and its ability to generate future economic benefits.

- **Simple asset based method with estimate of goodwill**: this method estimates the value of the economic capital as the sum of shareholders’ equity as expressed at current value and the goodwill or badwill attributable to the ability to generate a higher or lower return than what would normally be expected from a similar businesses.
- **Economic value added (EVA)**: this method considers the value of a company on the basis of the relation between cost of capital and return on capital employed.
Valuation Methods

Valuation Configuration

**Enterprise Value (EV)**
- Value for Investors
- Value of Net Invested Capital

Adoptable in transactions:
- related to business units
- related to operative complex

**Equity Value (We)**
- Value for Shareholders
- Value of Equity

Adoptable in transactions:
- related to the acquisition of stocks/shares
- related to operations on equity

**Financial and Economic correlations**

- Revenues
- EBITDA
- EBIT
- Operating Cash Flow

**Net Invested Capital**

**NFP**

**Equity**

- Net Income
- Dividends (shareholders cash flow)
The choice of valuation method and configuration depends on different factors:

- **Company business**
- **Market features (dynamic, static)**
- **Valuation Aim**
- **Company status (Start up, Growth, Crisis)**
- **Available data**
- **Accounting policy**

Attention to *industry-specific and case-specific valuation techniques*
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EVA
Method Overview

Combined Method

Capital
- Assets value
- Cost of capital

Income
- Income cash flows
- Margin analysis

EVA_i = NOPAT - NOIC_i * WACC_i

where:
- **Nopat** Operative income after tax (adjusted)*
- **NOIC** Net operating invested capital (adjusted)*
- **Wacc** Weighted Average cost of capital

* Required adjustments are explained in the following pages
**EVA**

**Method Overview**

**Discount rates**

**WACC**

- It corresponds to the Cost of Debt and Cost of Equity, weighed by a normal capital structure. WACC represents the rate of return expected by debt and equity providers in a company. In formula

\[
WACC = w_eK_e + w_dK_d(1-t)
\]

Where:
- WACC: Weighted Average Cost of Capital
- We: Weight of Equity
- Wd: Weight of Net financial debt
- Ke: Cost of Equity
- Kd: Cost of Debt
- t: Corporate tax rate (tax shield on interest expense)

**Ke**

- Cost of Equity is generally defined as the average return expected by an equity investor in a company. According to the Capital Asset Pricing Model technique, Cost of Equity is the sum of the rate of return on risk-free assets “rf” and an equity market risk premium “s”. In formula

\[
Ke = rf + s = rf + \beta(rm - rf)
\]

Where:
- Ke: Cost of Equity
- rf: Rate of return on risk-free assets
- rm: Expected market return on Equity
- \(\beta\): Non-diversifiable risk coefficient “Beta”
EVA Method Overview

Combined Method

EVA = NOPAT – (NFP*Kd + E*Ke)

*Extraordinary items not included
EVA

Method Overview

\[ EV = NOIC + \sum_{i=1}^{n} EVA_i \times (1+WACC)^{i-n} \]

**Market Value Added (MVA):** it expresses the value of generated goodwill

**Value breakdown**

- \( EVA_1(1+Wacc)^1 \)
- \( EVA_2(1+Wacc)^2 \)
- \( \ldots \)
- \( EVA_n(1+Wacc)^n \)
- \( NOIC \)
- **MVA**

**EVA highlights the real profitability of invested capital regardless accounting policies**
Focus on MVA meaning

MVA represents the difference between the firm market value and the book value of Capital employed. Changes in MVA shows how the company improves value creation.

\[ \text{MVA} = \text{EV} - \text{Capital employed} \]
Methodology

NOPAT

**NOPAT must be normalized to avoid discretionary policies:**
- Goodwill amortization
- Increase in employee Severance indemnity
- Increase in provisions for taxation and allowance for doubtful debtors
- Capital gain/capital loss
- LIFO reserve
- Charges on Leasing

NOIC

**NOIC must be adjusted to be expressed at current values:**
- Goodwill amortized
- Intangibles
- Formation and expansion expenses;
- Funds and Provisions
- LIFO Reserve;
- Present value of leasing
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4. M&A most used methods: DCF and Multiple methods
   - DCF
   - Multiple Method
5. Methods Adjustments
6. From value to price
7. Valuation in particular contexts
M&A most used methods: DCF and Multiples

Introduction

The most used methods in M&A valuations are DCF and Multiples methods.

Multiples methods

Market assumptions that reflect:

✓ Growth expectations of financial and economical results
✓ Risk evaluation

The equity value is determined on the base of stock market prices of peer companies or comparable transaction prices

Relation between the market value of peers and financial/economical variables of the target company

DCF methods

Formulation of estimates in relation to:

✓ Forecasts of results trend (cash flow processing)
✓ Company risk profile (WACC estimate)

The equity value is based on the present value of estimated cash flows.
DCF is one the most used analytical methods because it leads to the valuation of the financial and economical perspectives of a company.

The value of a Company is reported on a «on going concern basis» as the sum of 2 parts:

- **Value of the plan period**: Present value of cash flows analytically estimated along the BP period.
- **Terminal Value**: Present value of perpetual operating cash flow that can be kept on after the BP period.

**Main aspects**:
- Investments necessary to realize the expected growth
- The growth on a long term basis of the operating cash flow
M&A most used methods: DCF and Multiples

DCF

The value of a business is equal to the sum of the present value of cash flows expected over a definite projection period

\[
\text{CF Present Value} = \sum_{t=1}^{n} F(t) (1 + r)^{-t}
\]

where:
- \( F(t) \) Cash flows (projection period)
- \( n \) Projection period
- \( r \) Discounted Rate
The role of Terminal Value

\[ \text{Present TV} = \left[ \frac{\text{Terminal CF}^{(n)}}{(r - g)(1 + r)^{-n}} \right] \]

where:
- **Present TV**: Present Terminal Value
- **Terminal CF**: CF at the end of the analytic prevision period
- **r**: Discount rate
- **g**: Perpetual growth rate of CF
- **t**: number of period of analytic prevision

Main criticisms
- Terminal CF must be sustainable
- «g» must be «defensible»
  - 0.5 - 1% in steady sector
  - 2.5 – 3% in high growth sectors
  - >3.5% «aggressive» (before internet-bubble)
- WACC could be raised to adjust terminal CF

Some evidences

<table>
<thead>
<tr>
<th>Business</th>
<th>BP Period</th>
<th>Terminal Value/Enterprise Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steady</td>
<td>5-7 years</td>
<td>45%-55%</td>
</tr>
<tr>
<td>In growth</td>
<td>4-5 years</td>
<td>60%-70%</td>
</tr>
<tr>
<td>In high growth / Start-up</td>
<td>4-5 years</td>
<td>&gt; 90%</td>
</tr>
</tbody>
</table>

(*) CF configuration depends on the chosen approach: CFE if levered (discount rate will be Ke), FCF if unlevered (discount rate will be WACC)
DCF links the value of a company to its capability to produce cash flows in a specific stretch of time. On the basis of adopted cash flows it declines in two variables:

**Levered**
- ✓ using equity cash flows

\[
W = \left[ \sum_{t=1}^{n} \text{FCE}(t) \left( 1 + \text{Ke} \right)^{-t} + \text{TV}(1 + \text{Ke})^{-t} \right]
\]

- \(W\) = Equity value
- \(\text{FCE}(t)\) = levered cash flows (explicit projection period)
- \(\text{TV}\) = Terminal Value (residual) of the operating activity
- \(\text{Ke}\) = Cost of Equity

**Unlevered**
- ✓ using operating cash flows

\[
W = \left[ \sum_{t=1}^{n} \text{FCF}(t) \left( 1 + \text{WACC} \right)^{-t} + \text{TV}(1 + \text{WACC})^{-t} \right] + \text{SA} - \text{NFP}
\]

- \(W\) = Equity value
- \(\text{FCF}(t)\) = unlevered cash flows (explicit projection period)
- \(\text{TV}\) = Terminal Value (residual) of the operating activity
- \(\text{WACC}\) = Weighted average cost of capital
- \(\text{SA}\) = Surplus Assets
- \(\text{NFP}\) = Net financial position

Alternative of Levered DCF: **Dividend Discount Method**
- ✓ It uses Dividend Cash Flows
- ✓ It's used if the company valued is an holding company or a financial company

\[
W_{ps} = \text{DPS} \left( 1 + \text{Ke} \right)^t
\]
M&A most used methods: DCF and Multiples

DCF: critical aspects

- Need of determining reliable future cash flows
- Relevant role of the expert who realizes the valuation in the estimate of the discount factor
- Difficulties in the identification of the time frame, since the transaction date, to whom is attributable a stable growth
M&A most used methods: DCF and Multiples

Multiple Method

Then multiples can be classified in base of the valuation perspective: **ASSET SIDE** or **EQUITY SIDE**

**ASSET SIDE**

- **EV/sales**: Market appreciation concerns company’s capability of achieving a determined turnover value.
- **EV/Ebitda**: It allows to appreciate the value of a Company apart from the financial structure.
- **EV/Ebit**: It reflects the different operative efficiency level of the peers.

**EQUITY SIDE**

- **P/E**: Immediate indicator of company’s performance.
- **P/BV**: It compares company book value to its market value.

**Indirect estimate of Equity Value:**

\[ W = \text{Selected Multiple} \times \text{company’s selected economic variable} - \text{Net Financial Position (NFP)} \]

**Direct estimate of Equity Value:**

\[ W = \text{Selected Multiple} \times \text{company’s selected economic/financial variable} \]
M&A most used methods: DCF and Multiples

Multiple Method

Before every valuation it’s necessary to realize some **preparatory activities**, that are essential for the valuation process.
M&A most used methods: DCF and Multiples

**Multiple Method**

**Main critical aspect of Multiple methods**

- Multiples reflect market «mood»

Therefore, the value will be overestimated (underestimated) if the market overestimates (underestimates) the comparable companies

**Correct use of Multiples presumes**

- Correct identification of the multiple to use
- Correct definition of the “economics” of the target company
- Correct definition of the “debt level” of the target company
Identification of the right fundamental

Comprehension of fundamentals (multiple breakdown) that determine the multiple and understanding the links between fundamentals’ variations and multiple variations (*)

Hypothesis of Peer market multiples and transaction multiples

- Identification of comparable companies
- Multiple analysis not only in the specific sector
- Consistent multiple definition (consistency between numerator and denominator) in order to have the same construction for all the peer companies

(*) The application of multiple method can not exclude a careful analysis of fundamentals at the basis; a summary application could lead to a wrong valuation of the target company.
M&A most used methods: DCF and Multiples

Multiple Method

**Correct definition of the «economics» of the target company**

Adjustment of target company's financials are necessary in order to eliminate potential distortions and elements that don’t represent the real profitability of the company. The aim is to determine financials that are feasible to be replicated forward.

**EBITDA**

The aim is to eliminate potential distortions and elements that don’t represent the real profitability of the company. The aim is to determine an adjusted income that is feasible to be replicated forward.

**NFP**

Normalization of the Net Financial Position of the target company in order to determine the real debt level of the target company, without any distortions.

**Main normalizations:**

- Not replicable incomes
- Management fees (outgoing shareholders)
- Leasing reclassification (IAS 17)
- Imputed interest (eg. rental)
- Normalization of management policies
- Non recurring extraordinary items

**Main normalizations:**

- Seasonality effects
- Time gap proceeds-payments
- Leasing reclassification (IAS 17)
- Employee severance indemnity
- Accounting distortion
- Reclassification of financial items (Derivatives)
M&A most used methods: DCF and multiples

**Multiple Method Approach**

**Multiple application**

\[
\text{EBITDA (}+/-\text{) normalizations (contingent)} \times \text{Chosen Multiple} = \text{Enterprise Value} + \text{NFP (}+/-\text{) normalizations (contingent)} = \text{Equity value}
\]

- **Elimination of distortion effects**
- **The applied multiple represents the summary of a complex valuating process:**
  - Comparable analysis
  - Test of multiples comparability
  - Choice of selected multiple for valuation purpose
- **Elimination of distortion effects**
- **Application of premium and discounts**
  - They allow to rectify the determined value for the purpose of considering the peculiarities of the specific transaction
M&A most used methods: DCF and multiples

Multiple Method Approach

<table>
<thead>
<tr>
<th>Reference price</th>
<th>DEAL MULTIPLES</th>
<th>STOCK MULTIPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔ Deal price</td>
<td></td>
<td>✔ Stock price</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transaction object (perimeter)</th>
<th>DEAL MULTIPLES</th>
<th>STOCK MULTIPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔ Whole equity value</td>
<td>✔ Majority/minority stocks</td>
<td>✔ Company assets</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Payment methods</th>
<th>DEAL MULTIPLES</th>
<th>STOCK MULTIPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔ Acquirer’s shares</td>
<td>✔ Acquirer’s debt</td>
<td>✔ Cash</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Target Company status</th>
<th>DEAL MULTIPLES</th>
<th>STOCK MULTIPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔ Listed</td>
<td>✔ Not listed</td>
<td>✔ Listed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Premiums and discounts</th>
<th>DEAL MULTIPLES</th>
<th>STOCK MULTIPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔ Price can include control premium or cash discount</td>
<td>✔ In concentrated sectors the quotations of target companies can include a premium</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Price nature</th>
<th>DEAL MULTIPLES</th>
<th>STOCK MULTIPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔ Referred to a specific transaction date</td>
<td>✔ “Made” price</td>
<td>✔ Always available</td>
</tr>
</tbody>
</table>
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Regardless the adopted valuation method if the object of the valuation is a Group of companies you must consider the role and value of minorities.

In case of minority interests in subsidiaries part of the results are up to third parties (they are not up to group)
The valuation of a company is influenced even by the way of payment used in the transaction and the contingent application of earn-out provisions.

**PAYMENT METHODS**
- The deal price is more significant in case of cash deal
- The price can be settled even by stock (share by share) or combining cash and shares.

**EARN-OUT**
- During the closing phase the price can be related to earn-out provisions
- Part of the price is settled ex-post, according to the achievement of BP objectives.

The valuation result in case of stock payment or in case of earn out could be even significantly different than the same one but with cash payment.
Methods adjustments

Premium and discounts

In relation to the acquired stock you must consider contingent majority premiums/ minority discounts

MAJORITY
- Control premium
- Control premium decreases (until zero) as the % acquired gets to 100%

MINORITY
- Minority discount (lack of control, lack of marketability)
- The application of discounts could be partially balanced by the use of Drag Along and Tag Along provisions

**DRAG ALONG**
Provision aimed at protecting the investor in case of minority stakes: it concerns the right to obligate others (minorities) to sell their shares in order to optimize investor's way-out.

**TAG ALONG**
Provision aimed at protecting minorities: it concerns minority shareholder’s right to sell its shares under the same conditions achieved by the majority shareholder in case of sell of its stock at way-out moment.
Method adjustments

Control premium for listed companies

Premium configuration

- Private benefits of control
- Synergies
- Internal improvements

Acquisition Premium

Market Capitalization

CONTROL PREMIUM
Method adjustments

Control premium for listed companies

Premium configuration

Synergies
- Commercial synergies
- Distribution synergies
  - Product mix
- Upstream-Downstream integration and control
- Geographical expansion

Private benefits of control

Pecuniary (Tunneling)
- Self Dealing
  - Excessive above market compensation
  - Diversification of resources
  - Asset transferred at arbitrary prices
  - Cheap loans and guarantees
- Dilution
  - Insider Trading
  - Creeping acquisitions
  - Freeze-out and squeeze-out
  - Issuance of shares at dilutive prices

Not Pecuniary
- Amenities
  - Winning the world series
  - Influencing public opinion
  - Owning a luxury brand
  - Physical appointments
- Reputation
  - Social prestige
  - Family tradition
  - Promotion of relatives
  - Personal relations

Internal improvements
- Economies of scale
- Economies of scope
- Reorganization
- Cost savings
  (advertising, selling and marketing)
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From value to price

You can identify different value configurations in relation to the aim of the valuation:

- Transfer of control,
- Transfer of a minority stake
- Fair Value valuation
- Strategic/financial investment.

As an alternative it is possible to adjust the value obtained through a chosen method considering premiums and discounts.
For all these reasons the valuation usually becomes the starting point of a negotiating process which leads to the definition of the ultimate transaction price.

**Starting point: BUSINESS PLAN**

- Document containing strategic lines and *action plan* at the base of hypothesis and financial foresees.
- It’s the reference point for the evaluating process and for determining the interest of investors.
From value to price

Strategic and PE prospect

However, there are some differences between strategic investors and PE investors as regards the application of valuation techniques.

<table>
<thead>
<tr>
<th>Valuation techniques</th>
<th>Strategic prospect</th>
<th>PE prospect</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Use of Cash flow/fundamentals projections</td>
<td>✓ Use of Cash flow/fundamentals projections with an approach that appreciates feasible synergies</td>
<td>✓ Appreciation of fundamentals existing at the moment of valuation</td>
</tr>
<tr>
<td>✓ Consideration of development hypothesis included in the business plan (actions that will be put in practice post transaction)</td>
<td>✓ Check of development hypothesis included in the business plan and evaluation of contingent synergies</td>
<td>✓ Impossibility of appreciate all the development hypothesis (too many risks and duties not remunerated)</td>
</tr>
<tr>
<td>✓ “Optimal” going concern logic</td>
<td>✓ “Post integration” going concern logic</td>
<td>✓ “As is” (1) going concern logic</td>
</tr>
<tr>
<td>✓ Discounted factor coherent with the risk profile of cash flows (WACC)</td>
<td>✓ Discounted factor coherent with the risk profile of cash flows (WACC)</td>
<td>✓ High Profit expectations in terms of IRR (implicit discount rate of the price achievable through exit)</td>
</tr>
</tbody>
</table>

(1) The necessary normalization of contingent items mustn’t led to defining a value that incorporates the effect of future actions yet to realize (that will be realized after the investor entrance).
From value to price

Private Equity prospect

Definition of a price coherent with expected risk/performance levels

Application of a discounted factor consistent with the performance expectations of the investor:

\[ \text{IRR} \approx 25\% \]

This approach allows the investor to verify if the price obtainable through the exit can satisfy all performance expectations

**Price Present Value**

The price that the investor is willing to pay can be estimated defining the present value of the price obtainable through exit

\[
\begin{align*}
P_0 &= \text{PE Entrance} \\
T_1 &= \text{PE Exit} \\
P &= \text{Price} \\
P_1 &= \text{Price at PE Exit} \\
P_{\text{Wacc}} &= P_1 \text{ discounted at Wacc} \\
P_{\text{IRR}} &= P_1 \text{ discounted at expected IRR} \\
\end{align*}
\]

dove:
Investors’ remuneration in risk capital is measured by the annual compound interest of investment, since the moment it has been realized to the moment of stock divestiture (IRR)

\[
\text{IRR} = \left[ \frac{\text{FV}}{\text{PV}} \right]^{(1/n)} - 1
\]

\[
\sum_{k=1}^{n} \left[ \frac{F_k}{(1+\text{IRR})^k} \right] = 0
\]

where:
- \( n \) = Investment duration (number of years)
- \( \text{PV} \) = Realized investment
- \( \text{FV} \) = Cash in at the moment of divestment
- \( F \) = Generic cash flow (cash in or cash out)

To foresee the IRR it’s necessary to evaluate \( n \) and \( \text{FV} \): no financial investor will invest in a company, if there isn’t the forecast of a minimum IRR.

In the practice, the reference price of the transaction is usually defined using market multiples, in particular through the multiple EV/Ebitda
From value to price
Strategic investor prospect

**Strategic Investor Prospect**

In the strategic investor perspective contingent synergies assume very high importance. These synergic benefits should be estimated in terms of differential expected cash flows.

### Market synergies
- Absorption of a competitor and reinforcement of «market power»
- They can refer to all corporate functions (distribution, production, marketing, A&F, R&S, etc.) configuring as economies of scale and/or rationalization
- Ex. fiscal consolidated balance sheet, more negotiating power vs financier etc.

### Operative efficiency synergies

### Financial and fiscal synergies

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**Equity value stand alone**

- Expected synergies in the forecast period
- Potential controllable value
- Potential pure value

**Expected synergies beyond forecast period**

**Price limit for a strategic buyer**
From value to price

Additional considerations

**Price integration methods**

If the «potential» value of a company represents a significant part of the total value, it’s better to define a **flexible price**

- **Earn-out**: further adjustments of the price in connection with the achievement of specific plan objectives;
- Other procedures, determined in the single circumstance in relation to the specific needs of the parts involved.

**Real estate**

Financial investors usually don’t recognize to operative properties a value higher than the rent cost that the company otherwise should pay:

- For the purpose of valuing real estate at current market values, it’s possible to spin off the properties and rent them to the company instead of sell them.
Lesson 2 Summary

1. Introduction to Corporate Valuation
2. Valuation Methods
3. EVA
4. M&A most used methods: DCF and Multiple methods
5. Methods adjustments
6. From value to price
7. Valuation in particular contexts
Valuation in particular contexts

Introduction

**Start up**

- Company that has not achieved a steady state
- They don’t produce positive cash flow, or produce very low cash flows yet
- No projections

**Turnaround**

- Negative results
- Uncertain possibility to achieve a new equilibrium
- Different counterparts with interests in contrast

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Source: Guatri, “Nuovo trattato sulla valutazione delle aziende”
Valuation in particular contexts

Start-up

Because of the lack of historical data and trend, the starting point of start-up valuation are necessarily Business Plan’s forecasts.

Valuation methods need adjustment related to the specific situation:

Cash flow adjustments (both financial and economic method)

\[
W_p = \frac{R}{i} \cdot v^m + \sum_{1}^{n} (R_i - i'' \cdot C) \cdot v^i
\]

Notes:

- Really high in the first years (to-t1) because of the risk related to success
- It reduces in t2 and tends to normalization in t3
- Capitalization of losses in the first years
  - Reliability of BP
  - Sector features

The estimated value is always potential and can be considered also controllable only if the assumptions are clearly individuated and estimated.

Source: Guatri, “Nuovo trattato sulla valutazione delle aziende”
Turnaround

Possible solutions for a company in a crisis state:

- **Sell**
  - It would entail a badwill

- **Restructuring**
  - Potential recovery of an asset value through the investment of new finance

- **Wind up**
  - Extreme solution

\[ W_p = \frac{R}{i} \sum_{i=1}^{n} (R_i - i'' \times C_i) \times v^i _i - \sum_{i=1}^{s} I_i \times v^i \]

**Notes:**

- The discount factor should express the risk of investment in different period \( t_1, t_2, t_3 \)

**Source:** Guatri, “Nuovo trattato sulla valutazione delle aziende”