



Università degli Studi di Firenze

Advanced Corporate Finance

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Introduction

Course structure

Course structure

3 credits – 24 h – 6 lessons

1. Corporate finance
2. Corporate valuation
3. M&A deals
4. M&A private equity
5. IPOs
6. Case discussions



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

Introduction to Corporate Valuation

Introduction

Financial valuation as a tool for corporate investment decisions

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?

Introduction to Corporate Valuation

Valuation features

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

General

✓ Do not include any contingent effect of demand and offer or the involved players features

Objective

✓ Appropriate demonstrability and objectivity of hypothesis at the base of the chosen valuation method

Rational

✓ Value construction through a logical scheme

Stable

✓ Exclusion of elements related to extraordinary events

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

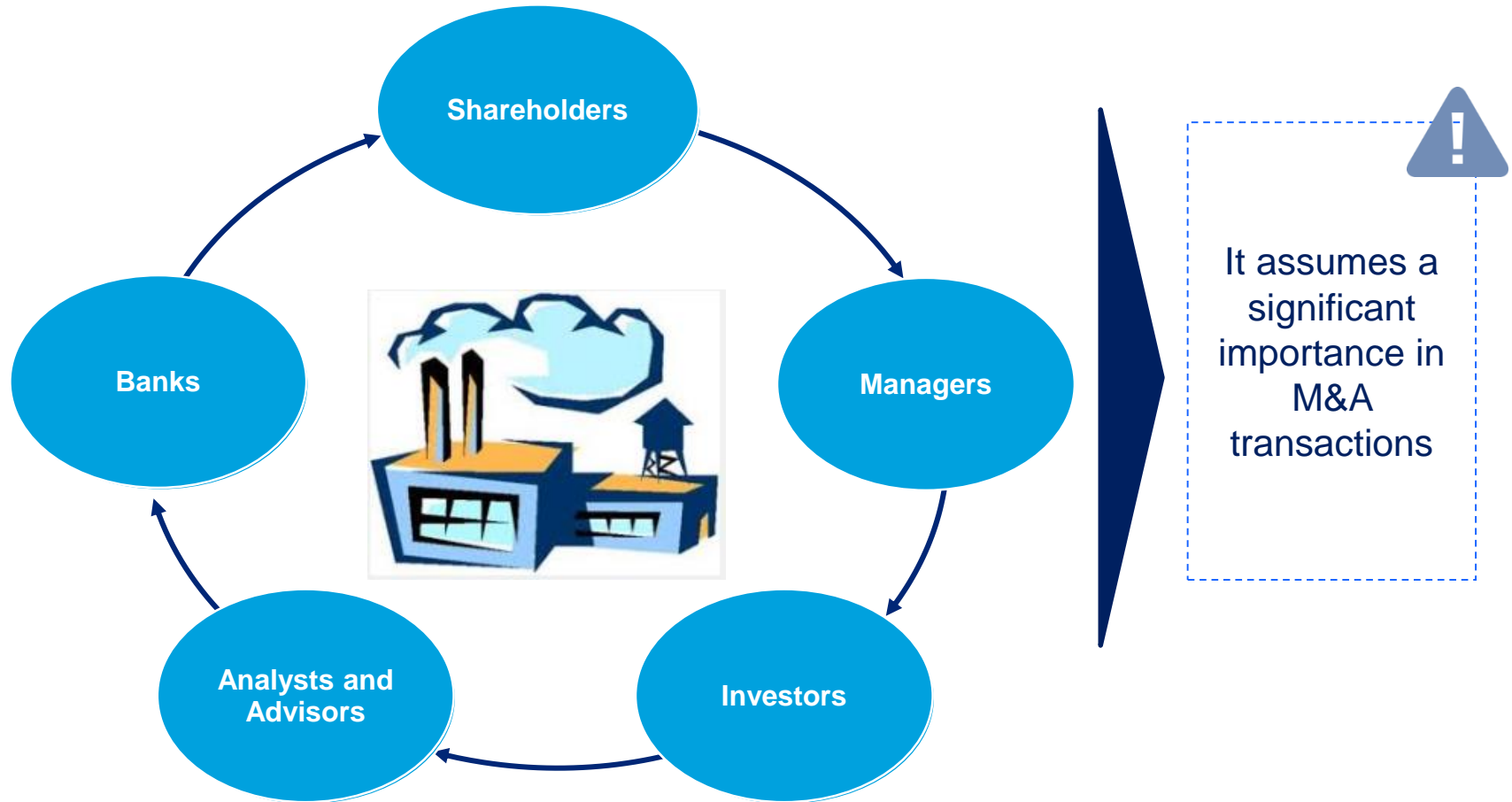
Periodical evaluations

- ✓ 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

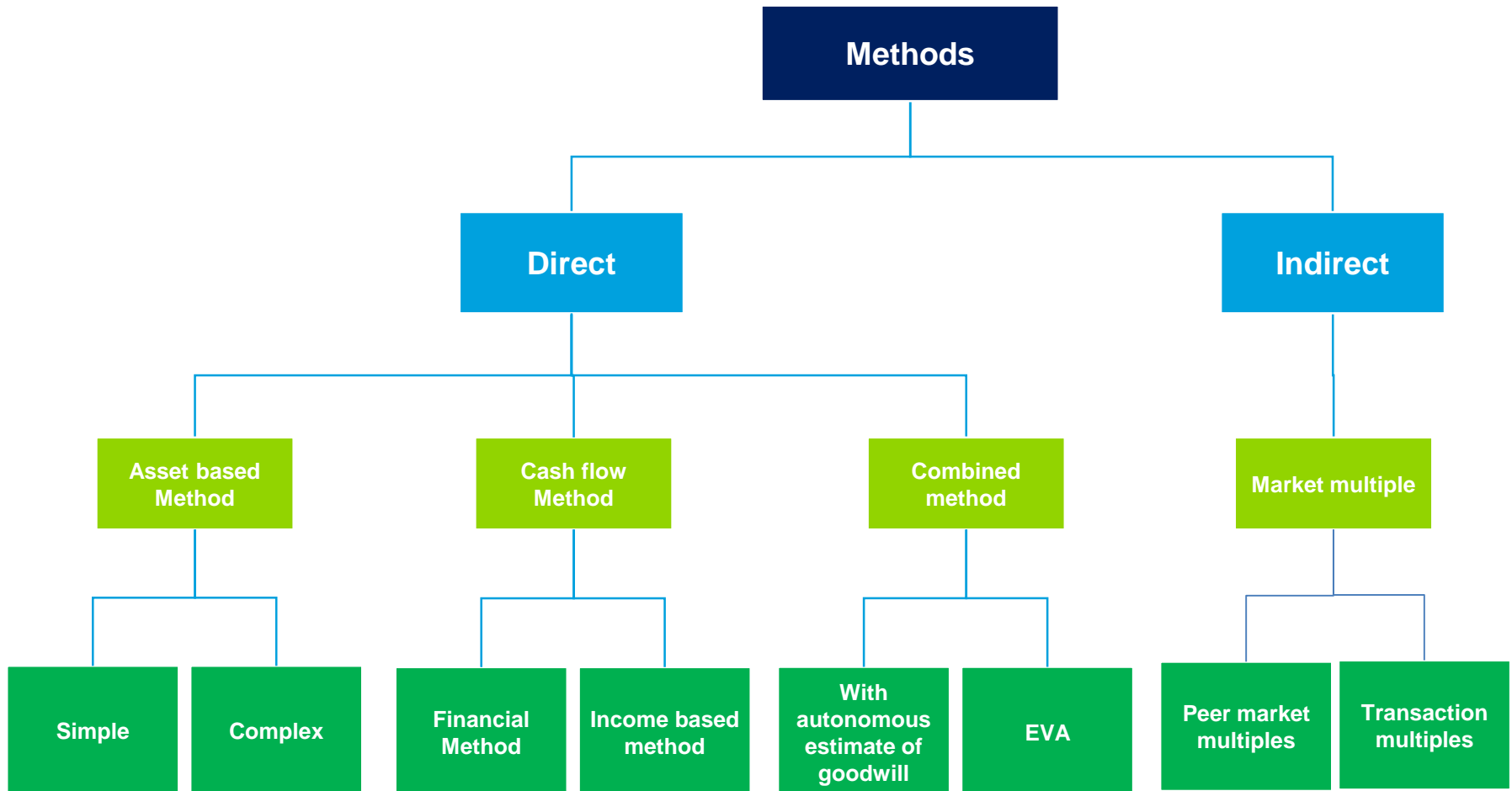


Lesson 2 Summary

- 1 Introduction to Corporate Valuation
- 2 **Valuation Methods**
- 3 EVA
- 4 M&A most used methods: DCF and Multiple methods
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Valuation Methods

Methods Overview



Valuation Methods

Methods Overview

Main Methods

Cash flow method



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:

- ✓ **Financial Method (DCF):** 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: **levered (equity side) or unlevered (asset side)**
- ✓ **Income based method:** 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: **levered (equity side) or unlevered (asset side)**

Multiples method



- ✓ **Peer market multiples:** this approach estimates the economic capital of a business based on the prices traded on organized markets for securities representing interests in comparable companies.
- ✓ **Transaction multiples:** this method allocates a business the value identified from transactions that have taken place in relation to controlling interests in comparable businesses.

Valuation Methods

Methods Overview

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 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

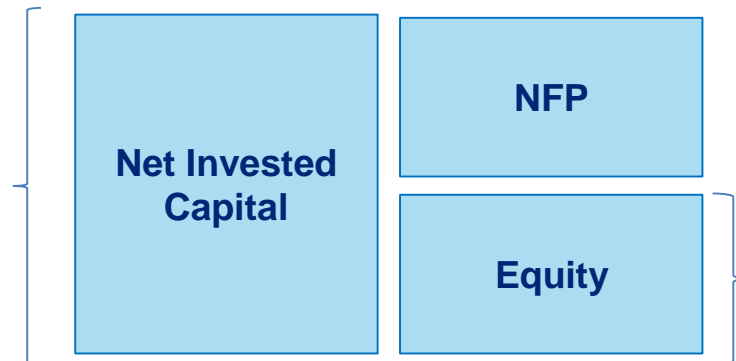


Adoptable in transactions:

- related to the acquisition of stocks/shares
- related to operations on equity

Financial and Economic correlations

- Revenues
- EBITDA
- EBIT
- Operating Cash Flow



- Net Income
- Dividends (shareholders cash flow)

Valuation Methods Selection

The choice of valuation method and configuration depends on different factors



Attention to industry-specific and case-specific valuation techniques

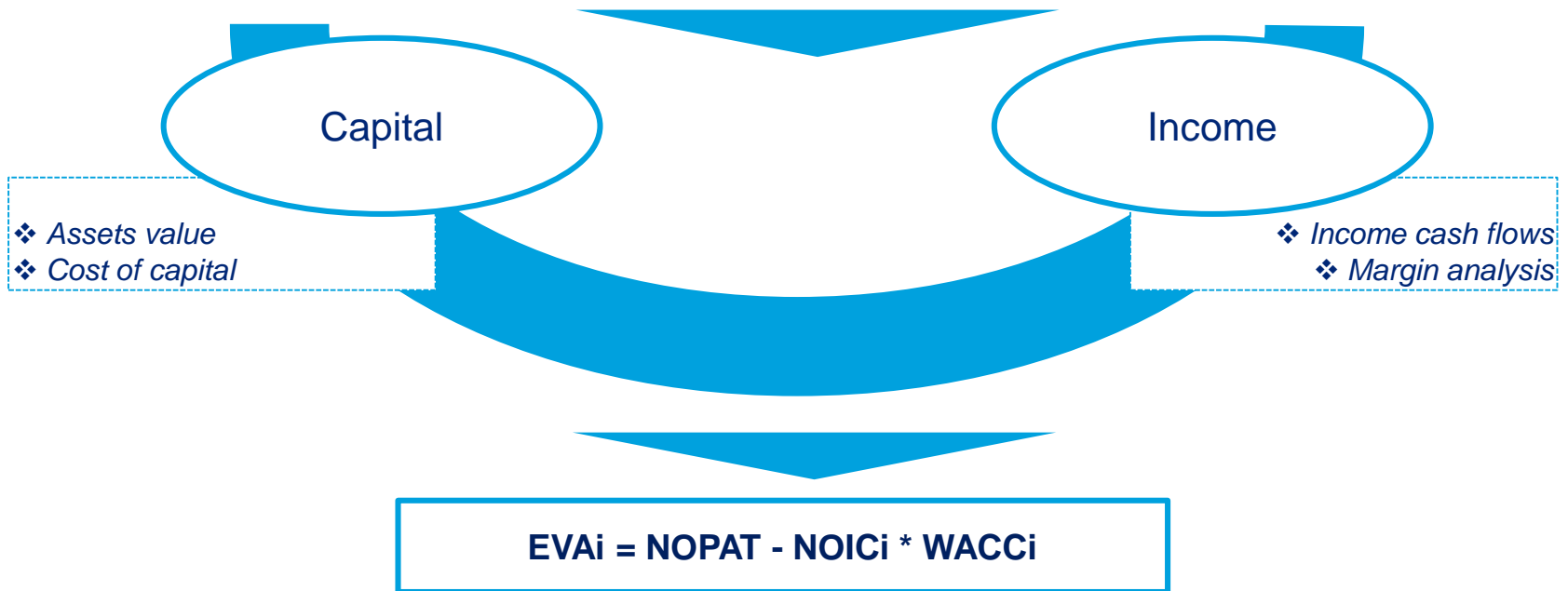
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EVA

Method Overview

Combined Method



where:

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

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

$$WACC = w_e K_e + w_d k_d (1-t)$$

Where:

WACC	Weighted Average Cost of Capital
W _e	Weight of Equity
W _d	Weight of Net financial debt
K _e	Cost of Equity
K _d	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 “r_f” and an equity market risk premium “s”. In formula

$$K_e = r_f + s = r_f + \beta(r_m - r_f)$$

Where:

K _e	Cost of Equity
r _f	Rate of return on risk-free assets
r _m	Expected market return on Equity
β	Non-diversifiable risk coefficient “Beta”

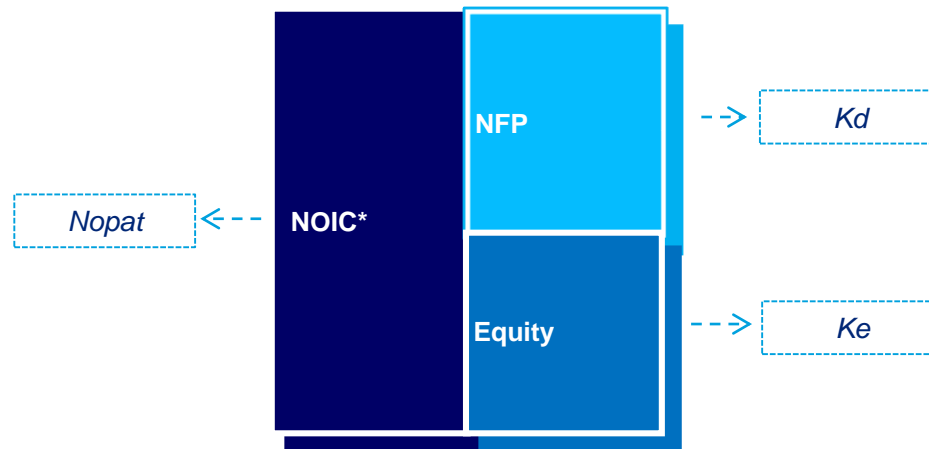
EVA

Method Overview

Combined Method



$$EVA = NOPAT - (NFP * Kd + E * Ke)$$



EVA

Method Overview

$$EV = NOIC + \sum_{i=1}^n EVA_i * (1+WACC)^{-i}$$

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

Value breakdown



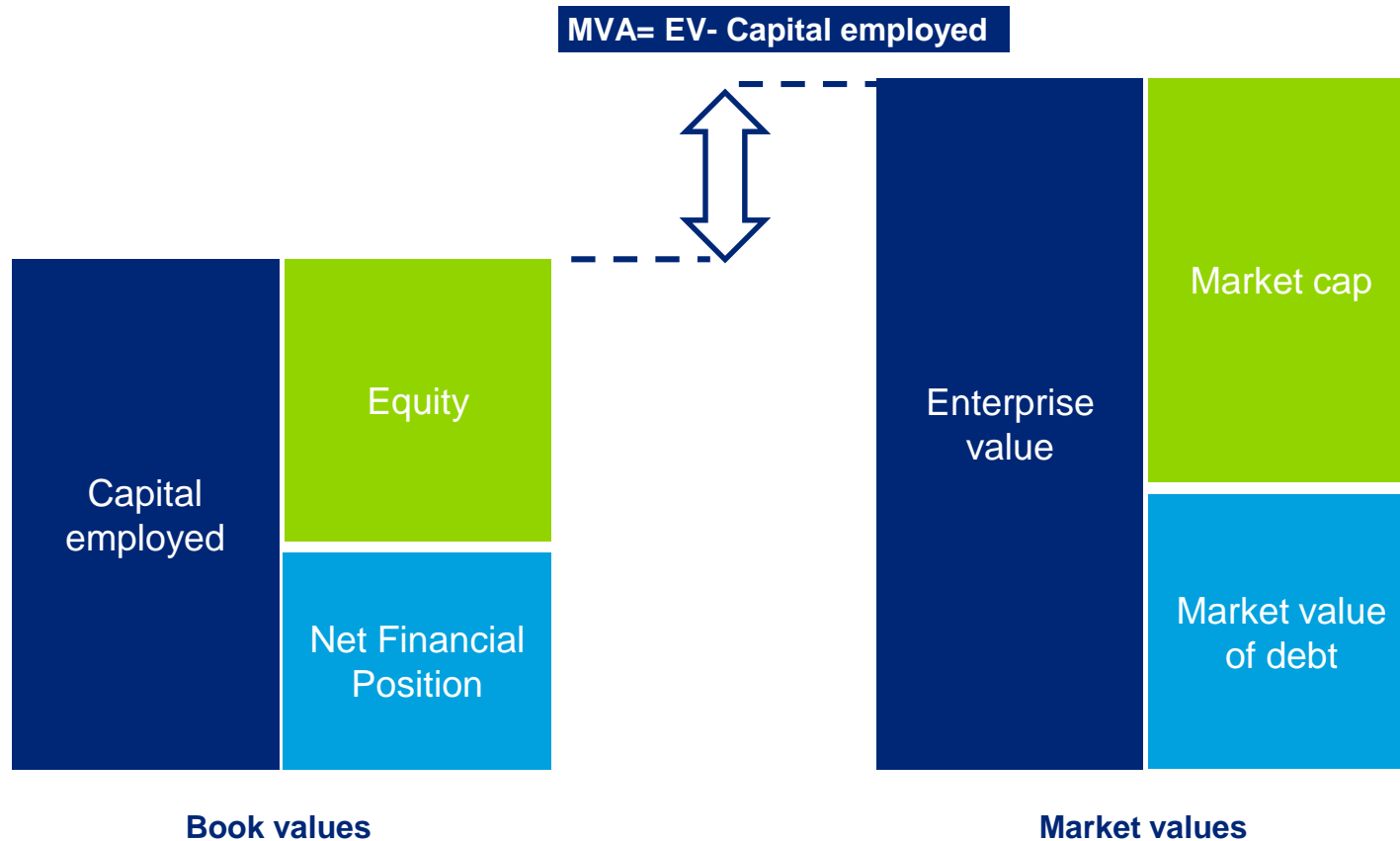
EVA highlights the real profitability of invested capital regardless accounting policies

EVA

Method Overview

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



EVA

Method Overview

Methodology

Restatements
required

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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 - DCF
 - Multiple Method
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M&A most used methods: DCF and Multiples

Introduction

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

Multiple 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.

M&A most used methods: DCF and Multiples

DCF

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

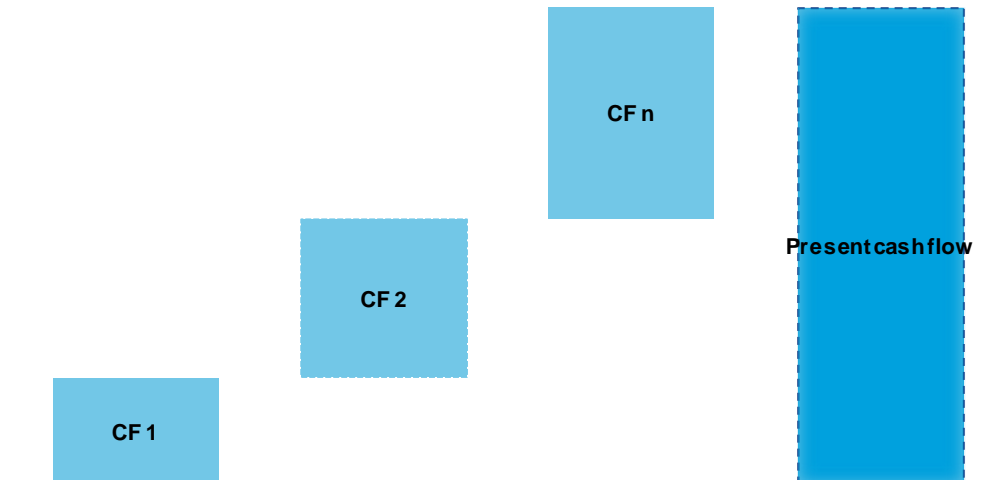
The value of a business is equal to the sum of the present value of cash flows expected over a definite projection period

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

where:

F(t)
n
r

Cash flows (projection period)
Projection period
Discounted Rate



M&A most used methods: DCF and Multiples

DCF

The role of Terminal Value

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

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

Terminal CF must be sustainable

Main criticisms

WACC could be raised to adjust terminal CF

«g» must be «defensible»

- 0,5 -1 % in steady sector
- 2,5 – 3% in high growth sectors
- >3,5 % «aggressive» (before internet-bubble)

Some evidences

Business	BP Period	Terminal Value/Enterprise Value
Steady	5-7 years	45%-55%
In growth	4-5 years	60%-70%
In high growth / Start-up	4-5 years	> 90%

(*) CF configuration depends on the chosen approach: CFE if levered (discount rate will be Ke), FCF if unlevered (discount rate will be WACC)

M&A most used methods: DCF and Multiples

DCF configuration

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

Unlevered

✓ using operating cash flows

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

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

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

Enterprise Value

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

Alternative of Levered DCF: **Dividend Discount Method**

- ✓ It uses Dividend Cash Flows
- ✓ It's used if the company valuated is an holding company or a financial company

$$W_{ps} = DPS (1 + Ke)^{-t}$$

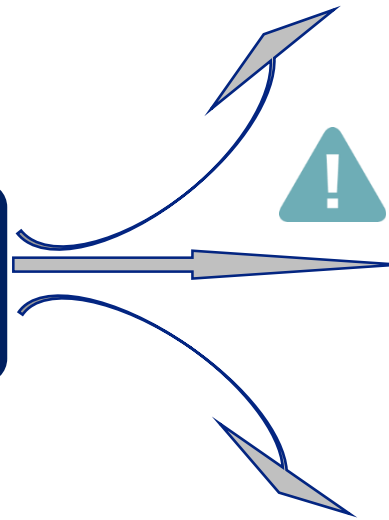


M&A most used methods: DCF and Multiples

DCF: critical aspects



Need of determining reliable future cash flows



Main critical aspects of DCF



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

Indirect estimate of Equity Value:

W = Selected Multiple x company's selected economic variable (-) Net Financial Position (NFP)

EQUITY SIDE

P/E

Immediate indicator of company's performance

P/BV

It compares company book value to its market value

Direct estimate of Equity Value:

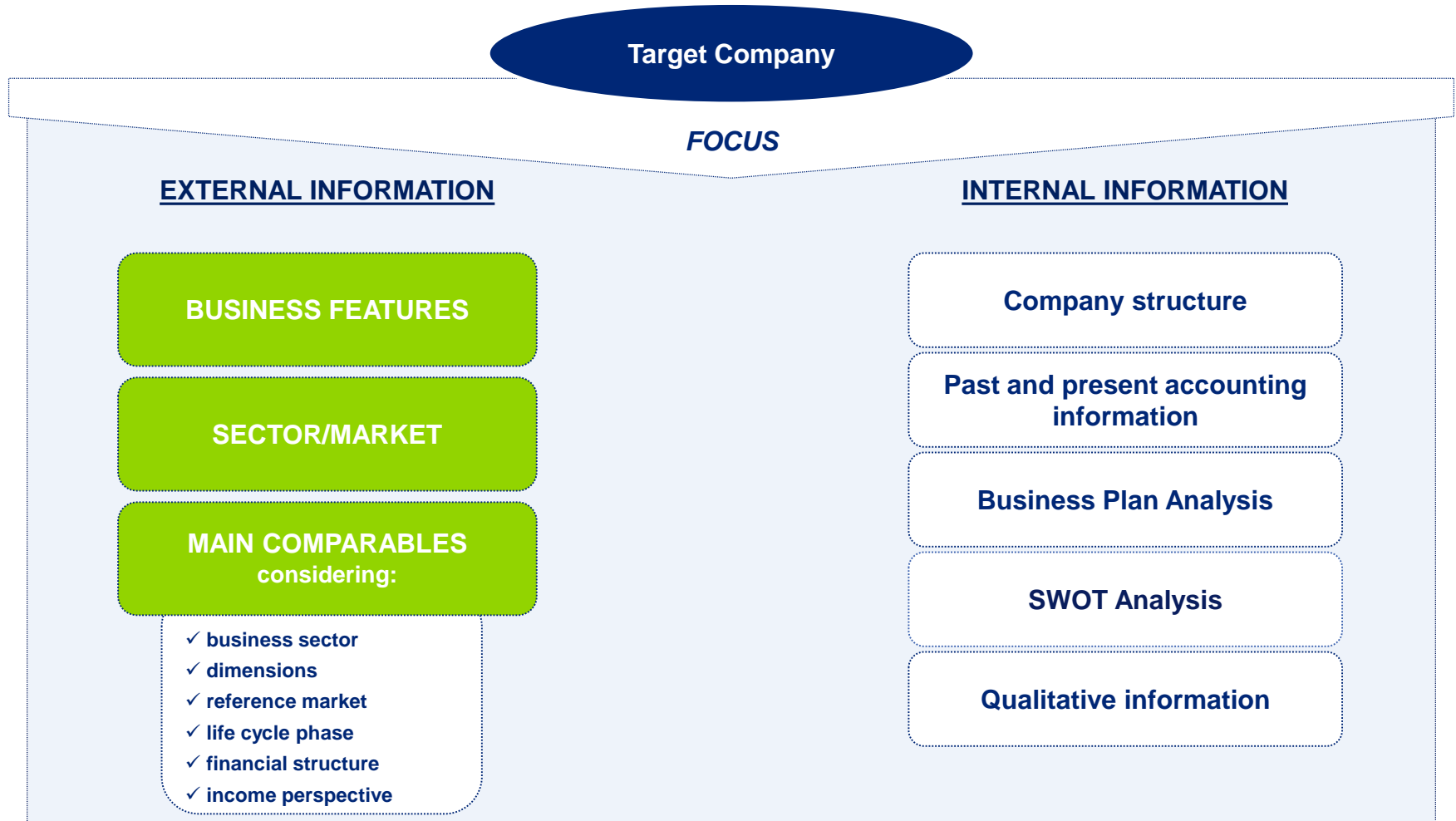
W = Selected Multiple x company's selected economic/financial variable



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 identification of the multiple to use

Correct use of Multiples presumes



Correct definition of the “economics” of the target company

Correct definition of the “debt level” of the target company



M&A most used methods: DCF and Multiples

Multiple Method

Identification of the right fundamental

Aim

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 led 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

Adjustments

NFP

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

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

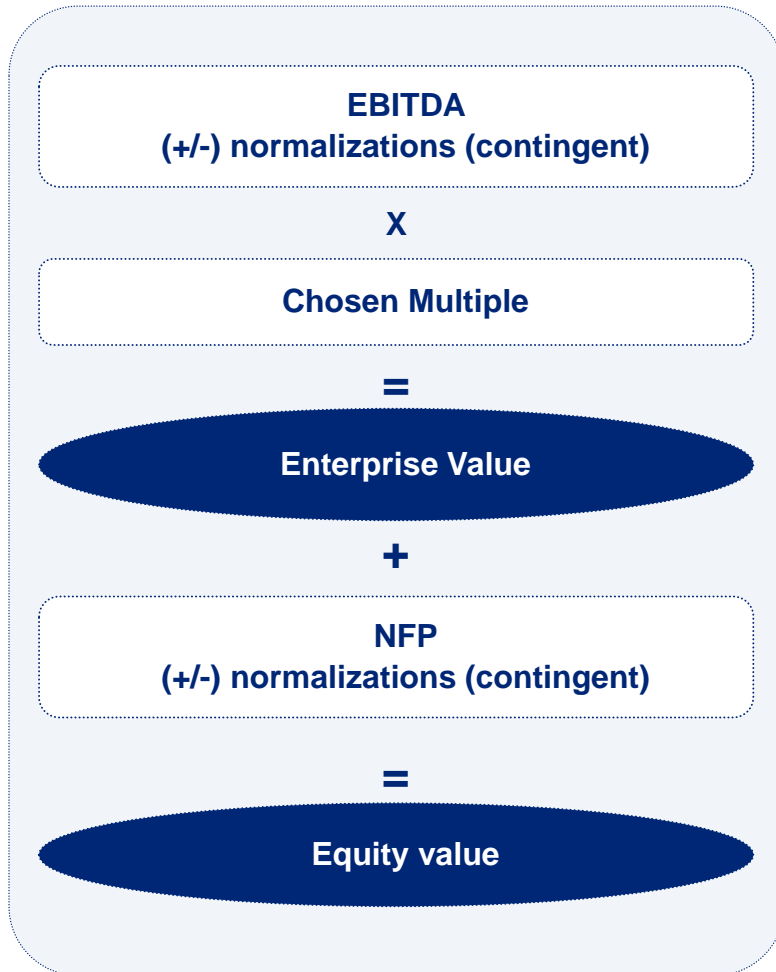
Main normalizations:

- ▶ 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



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

Multiple application

	DEAL MULTIPLES	STOCK MULTIPLES
Reference price	✓ Deal price	✓ Stock price
Transaction object (perimeter)	<ul style="list-style-type: none"> ✓ Whole equity value ✓ Majority/minority stocks ✓ Company assets ✓ Part of company assets 	✓ Minority stocks (usually)
Payment methods	<ul style="list-style-type: none"> ✓ Acquirer's shares ✓ Acquirer's debt ✓ Cash 	✓ Cash
Target Company status	<ul style="list-style-type: none"> ✓ Listed ✓ Not listed 	✓ Listed
Premiums and discounts	✓ Price can include control premium or cash discount	✓ In concentrated sectors the quotations of target companies can include a premium
Price nature	<ul style="list-style-type: none"> ✓ Referred to a specific transaction date ✓ "Made" price 	<ul style="list-style-type: none"> ✓ Always available ✓ "Feasible" price

Lesson 2 Summary

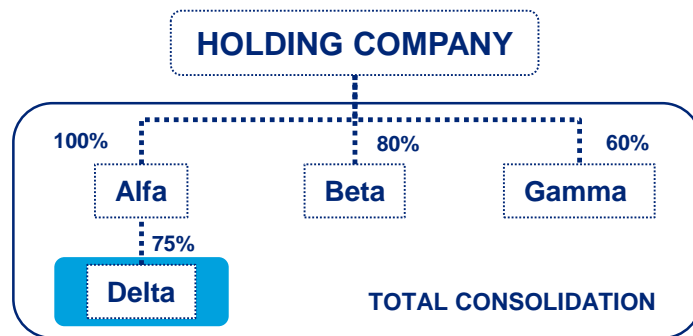
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Method adjustments

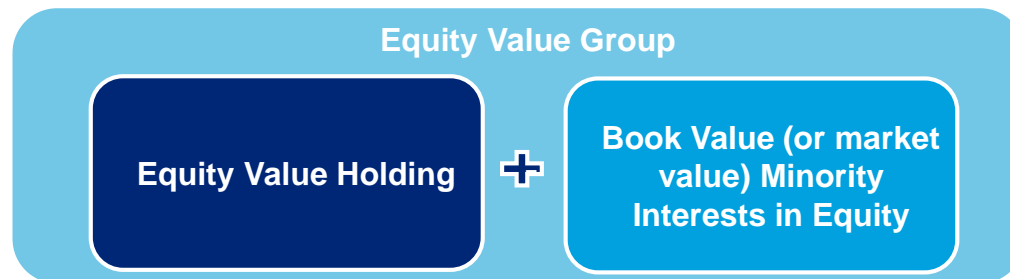
Group Structure

Group structure

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)



Payment methods

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 .

Payment Methods

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

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%

**% of stock
acquired**

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

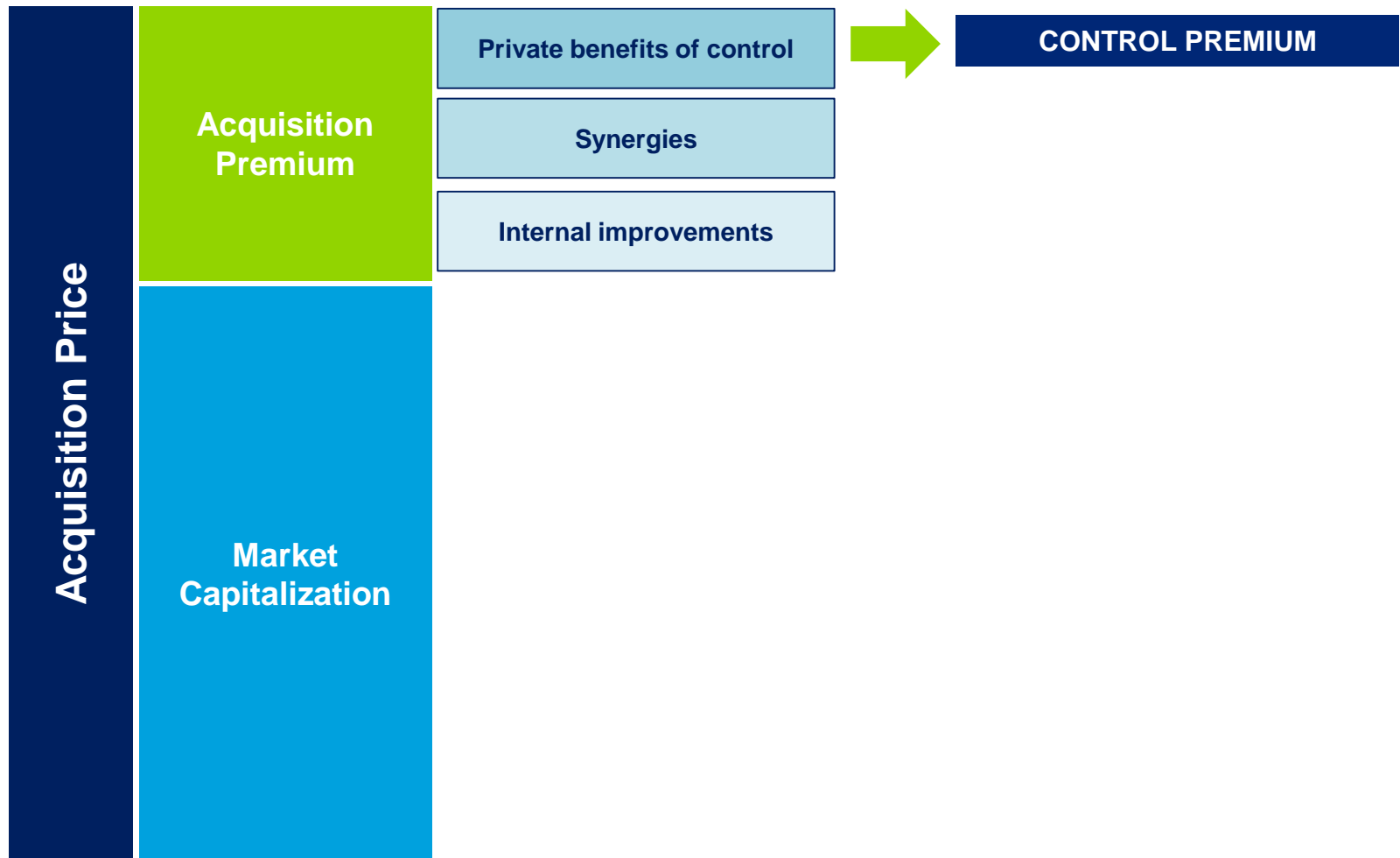
Provision aimed at protecting the investor in case of minority stakes: it concerns the right to obligate others (minorities) to sell their shares in order to optimize investor's way-out.

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.

Control premium for listed companies

Premium configuration



Method adjustments

Control premium for listed companies

Premium configuration

Synergies

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

Internal improvements

- ✓ Economies of scale
 - ✓ Economies of scope
 - ✓ Reorganization
 - ✓ Cost savings
- (advertising, selling and marketing)

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

Transferrability

+

-

CONTROL PREMIUM



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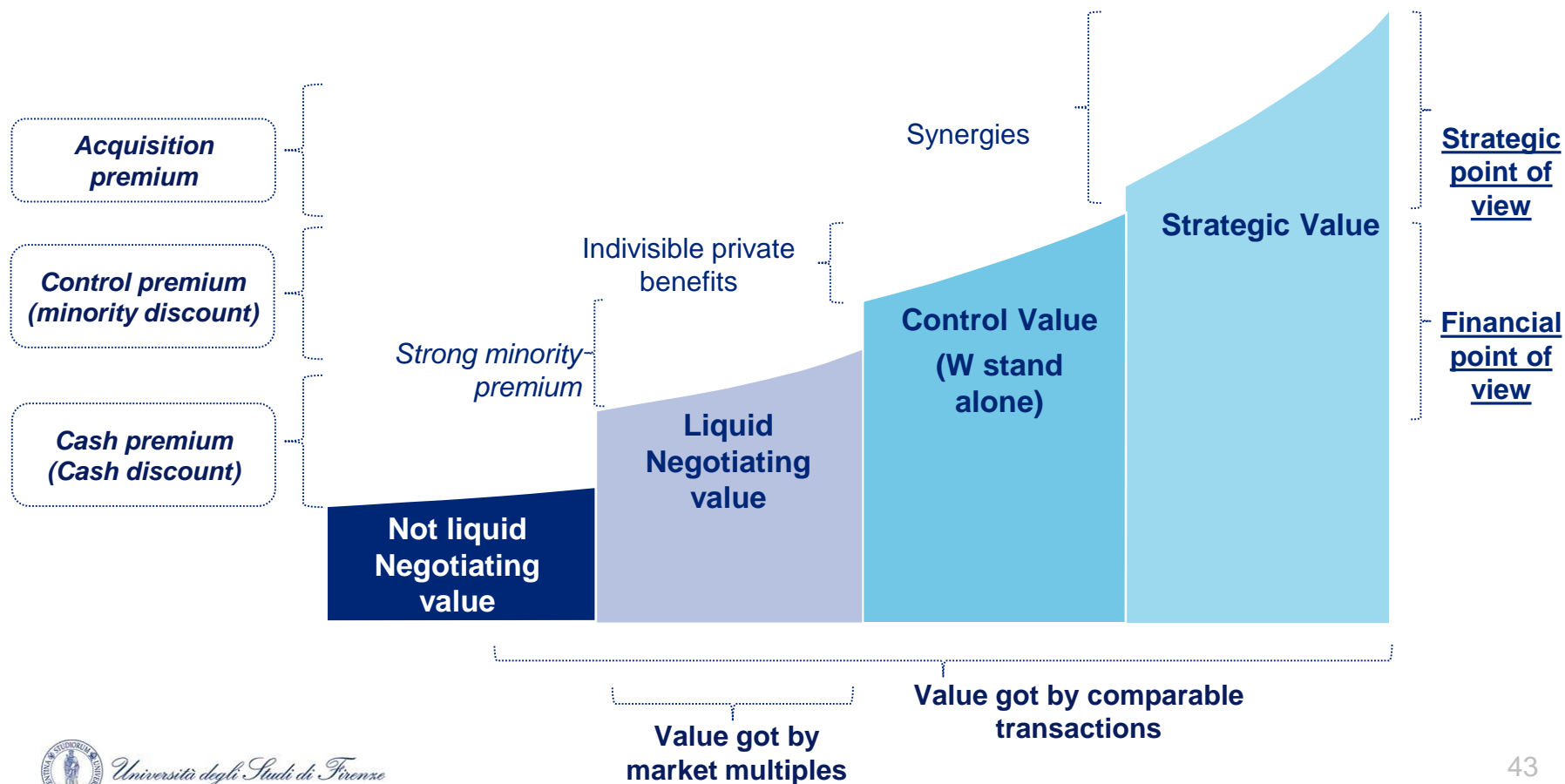
From value to price

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.



From value to price

From value to price

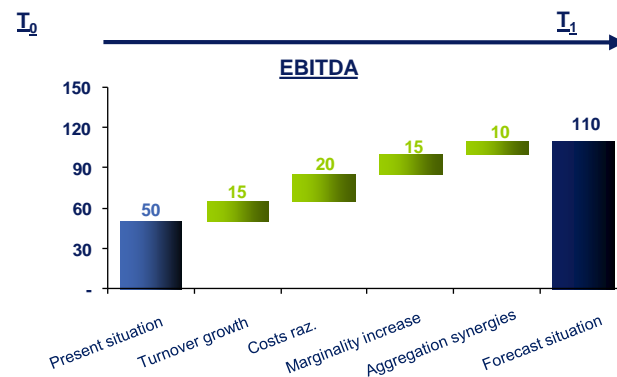
In regard to the discretionary margins of every valuation method, values resulting from different estimates can be rather different in connection with the **rationale** of the different counterparts



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

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

(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



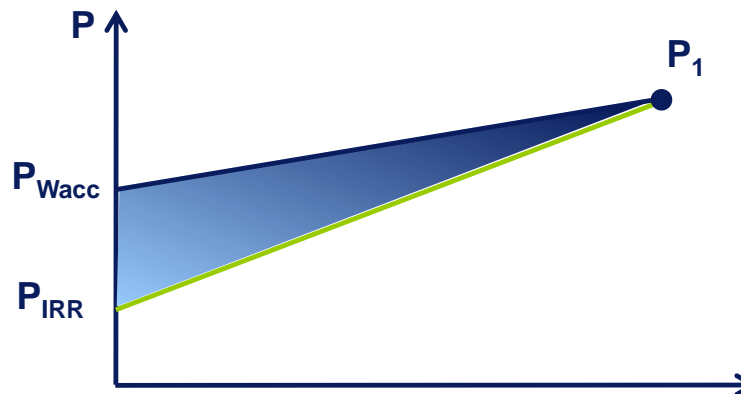
Application of a discounted factor consistent with the performance expectations of the investor:

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



dove:

T_0 = PE Entrance

T_1 = PE Exit

P = Price

P_1 = Price at PE Exit

P_{Wacc} = P_1 discounted at Wacc

P_{IRR} = P_1 discounted at expected IRR

 = extra profit required by the investor:

From value to price

Financial investor prospect

Financial Investor Prospect

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)

$$\text{IRR} = [\text{FV} / \text{PV}]^{(1/n)} - 1 \quad \longrightarrow \quad \text{If there is only one cash flow in entrance (way out)}$$
$$\sum_{k=1}^n [\text{F}_k / (1 + \text{IRR})^k] = 0 \quad \longrightarrow \quad \text{If there are more than 2 cash flows (cash in or out)}$$

where: n = Investment duration (number of years)
PV = Realized investment
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 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

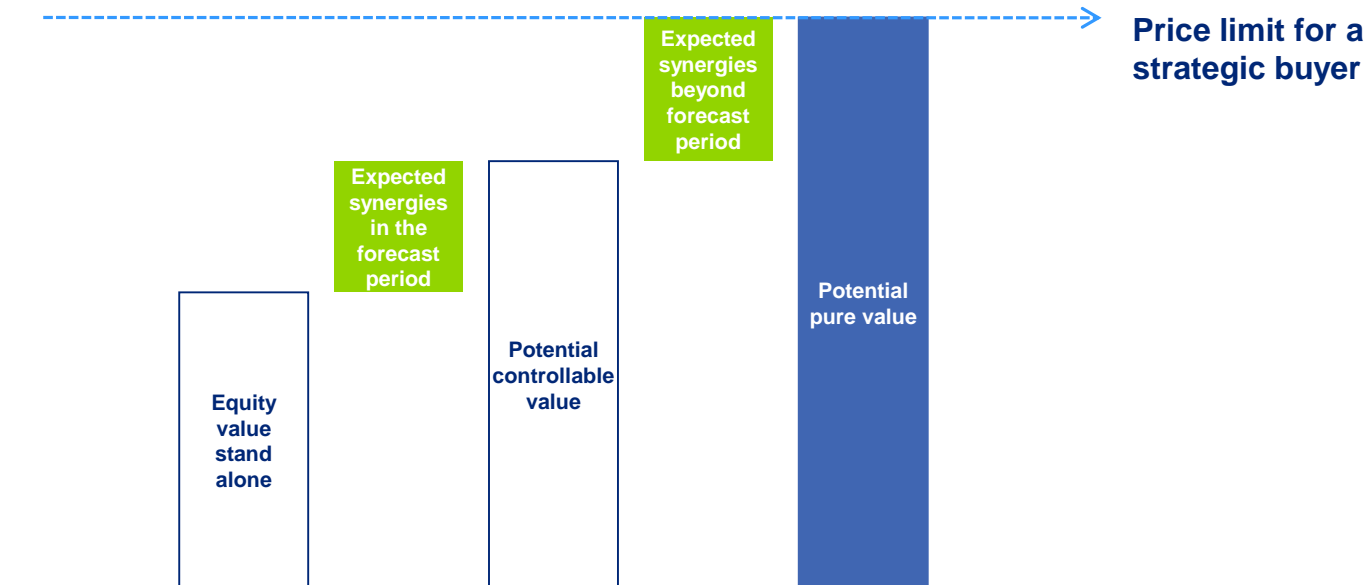
Absorption of a competitor and reinforcement of «market power»

Operative efficiency synergies

They can refer to all corporate functions (distribution, production, marketing, A&F, R&S, etc.) configuring as economies of scale and/or rationalization

Financial and fiscal synergies

Ex. fiscal consolidated balance sheet, more negotiating power vs financier etc.



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

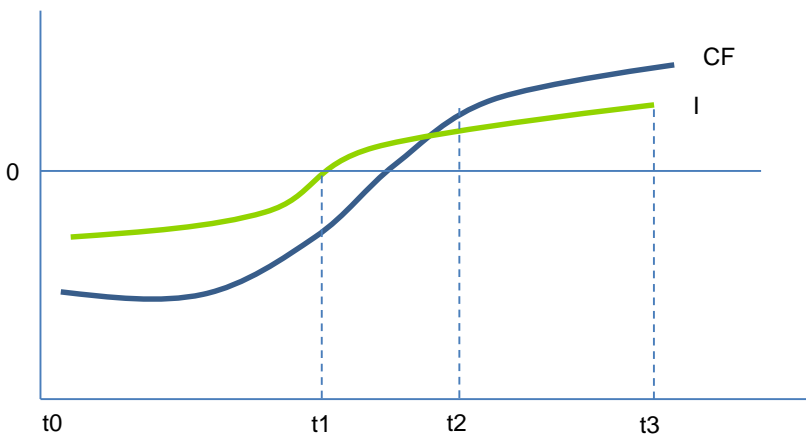
- 1 Introduction to Corporate Valuation
- 2 Valuation Methods
- 3 EVA
- 4 M&A most used methods: DCF and Multiple methods
- 5 Methods adjustments
- 6 From value to price
- 7 Valuation in particular contexts

Valuation in particular contexts

Introduction

Start up

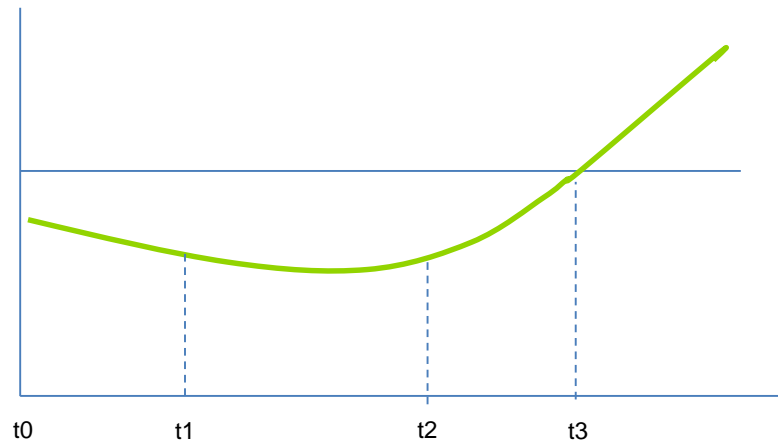
- ✓ Company that has not achieved a steady state
- ✓ They don't produce positive cash flow, or produce very low cash flows yet
- ✓ No projections



- ✓ First years of negative results (t_0 - t_1)
- ✓ BEP (t_1)
- ✓ Growing results (t_2)
- ✓ Steady state (t_3)

Turnaround

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



- ✓ t_1 : Ongoing crisis
- ✓ t_2 : sign of recovery
- ✓ t_3 : BEP achieving : step toward economic equilibrium (reduction of discount factor)



Source: Guatri, "Nuovo trattato sulla valutazione delle aziende"

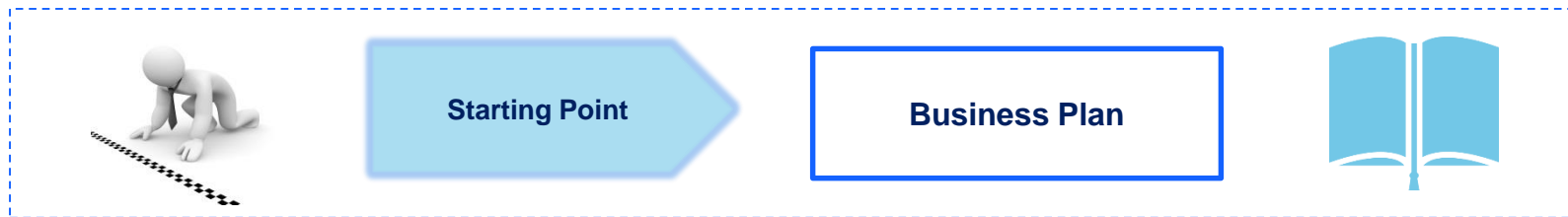
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Valuation in particular contexts

Start-up

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)

$$W_p = \frac{R}{i} * v^m + \sum_{j=1}^n (R_j - i^j * C) * v^j$$

W_p = Potential controllable value
 R = CF in steady state
 i = discounted cash flow related to the risk connected to R
 M = years necessary to achieve R
 R_i = cash flows (negative or positive) until the achievement of R
 i^j = cost of capital, cost of equity
 v^m, v^j = discount factors
 C = invested capital

Discount factor

Very strong Assumptions

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

Valuation in particular contexts

Turnaround

Turnaround

Possible solutions for a company in a crisis state:



It would entail a badwill



Potential recovery of an asset value through the investment of new finance



$$W_p = \frac{R}{i} * v^m - \sum_{1}^s (R_i - i'' * C_i) * v^i + \sum_{1}^s I_i * v^i$$



Extreme solution

Notes

W_p = Potential controllable value
 R = CF in steady state
 i = discounted cash flow related to the risk connected to R
 M = years necessary to achieve R
 R_i = cash flows (negative or positive) until the achievement of R
 i'' = cost of capital, cost of equity
 v^m, v^i = discount factors
 C = invested capital
 I_i = investment i

Notes:



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

In this case the potential value is determined adding at the formula seen for start up, the value of new necessary investments (I_1, I_2, \dots)
 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"

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