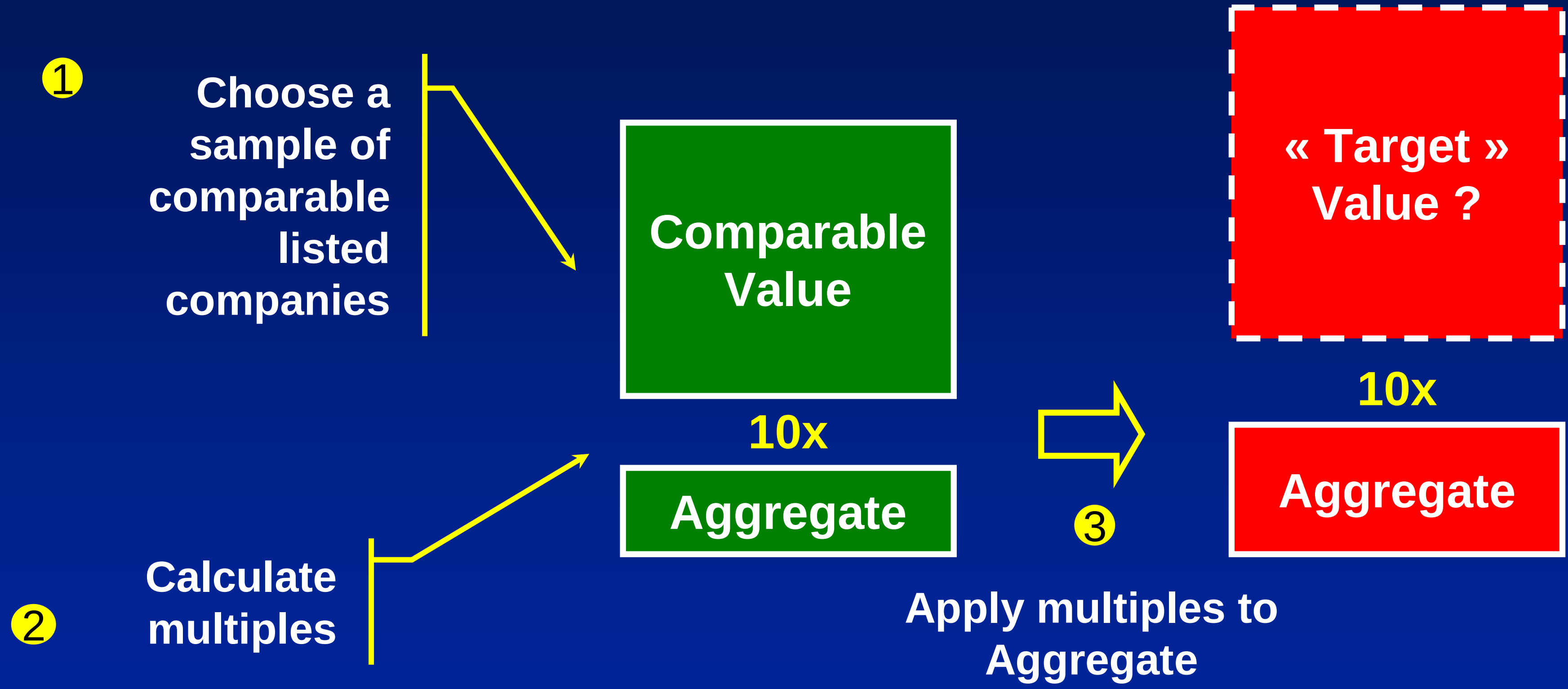
Multiples Method

 2007

Introduction to method

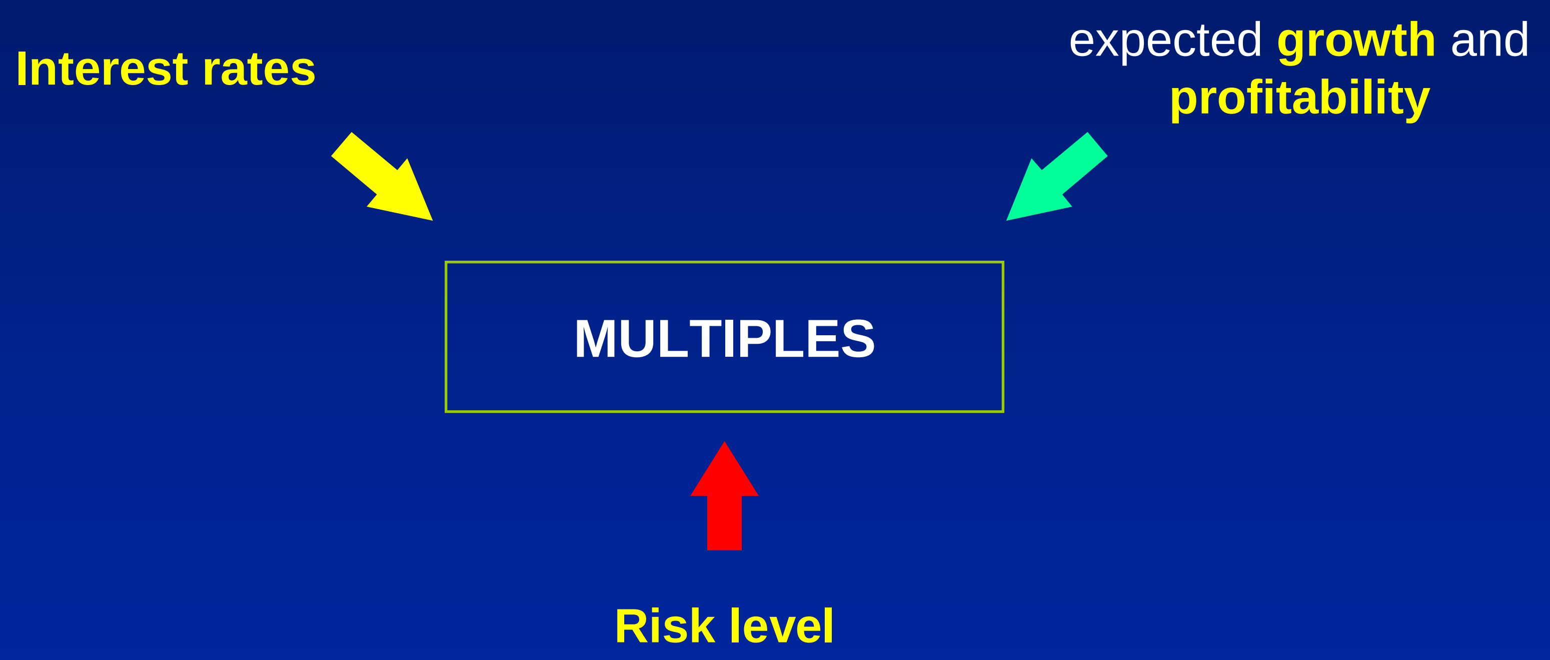
- **Three steps** in multiple method:



Value = Multiple x Aggregate

Introduction to method

- Principle : applying to the target a **multiple,** observed on a sample of **peers**
- Multiples give a value which integrates :



1. Choose a sample of comparable listed companies (1/2)

- **Listed** companies multiples
  - Sample of comparable listed companies
  - Based on companies' market value and 3-year aggregates (typically, last fiscal year and next two fiscal year consensus estimates)

- Multiples are all the more **relevant** as
  - Sample companies are comparable in terms of **growth** and **profitability**
  - Stock prices **do make sense** (liquidity et market efficiency)

1. Choose a sample of comparable listed companies (2/2)

- **Transactions** Multiples
  - Transactions on public or private companies
  - Multiples based on prices paid by acquirers (for 100% of the acquired company)

- Multiples are all the more **relevant** as
  - Sample companies are comparable in terms of **growth** and **profitability**
  - Transactions are recent and well documented

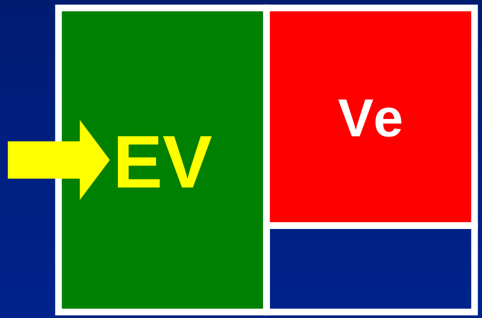
2. Calculating multiples – EV multiples

- Operating Multiples / sales

$$\text{X Sales} = \frac{\text{EV}}{\text{Sales}}$$

- EBITDA Multiples

$$\text{X EBITDA} = \frac{\text{EV}}{\text{EBITDA}}$$



- EBIT Multiples

$$\text{X EBIT} = \frac{\text{EV}}{\text{EBIT}}$$

2. Calculating multiples – Ve multiples

- Price earnings ratio (PE)

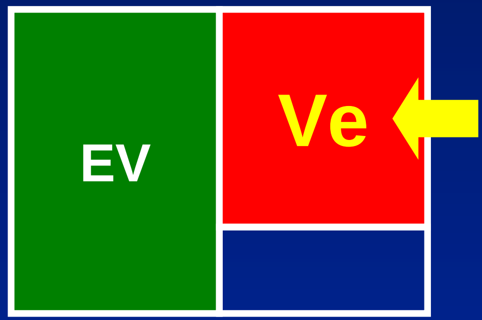
$$PER = \frac{Ve}{\text{Net Income}} = \frac{\text{Share Price}}{\text{Net EPS}}$$

- Cash Flow Multiple (PCF)

$$PCF = \frac{Ve+Vmi}{\text{Cash Flow}} = \frac{\text{Share Price}}{\text{CF/share}}$$

- Price to Book (PB)

$$PBR = \frac{Ve}{\text{Book value of equity}} = \frac{\text{Share Price}}{\text{Equity/share}}$$



2. Calculating multiples – Ve multiples

- PE is a **classical reference**...

- …but it assumes **an implicit capital structure**

- PE allows to grasp:
  - The contribution of **subsidiaries consolidated with the equity method**
  - … and **minority interests**
  - **Tax situation** of « target » peer.

3. Applying multiples – valuation range

- **Explain differences** rather than use averages

EV/EBIT	peer A	peer B	peer C	average	Std. deviation
2004	12,0x	**7,0x ?**	**49,0x ?**	**~~22,7x~~ ?**	**22,9x ?**
2005e	11,0x	11,0x	8,0x	10,0x	1,7x
2006e	10,0x	9,0x	6,0x	8,3x	2,1x

~~Average: 11,0x~~

- Never calculate **an average** on **several fiscal years**