

## MARKET RISK

### TOPICS OF THE COURSE

- The basis of risk management: "mark to market" principle, time horizon risk factors;
  - Future scenarios: probability density functions, scenario generation (parametric methods, historical and Monte Carlo simulation, hybrid methods, e.g. bootstrapping techniques);
  - Risk measures: standard deviation (volatility) & tracking error, quantiles (VaR), lower partial moments and downside risk, worst cases, sensitivities.
  - Stress testing & Back testing.
  - Defining and setting the appropriate risk policy.
  - Risk policies for active portfolios
  - Study of financial portfolios using a specific software: Definio Risk Analyzer
- The seminar will be carried out using the software Definio Risk Analyzer

### READING LIST:

Lecture Notes