

Chapter 8. Risk and Rates of Return

* What is "risk" and why does it matter?

Finance/Investing dealing with the future -> uncertainty -> risk

Given uncertainty, the risk is that we may earn less than anticipated.

Different investments have different levels of risk.

Different people have different attitudes to risk. And the same person can have different risk attitudes depending on what is at stake. => Risk aversion is assumed.

Risk Premium and required rate of return

Risk increases => Higher required return => Lower Financial Value

Sources of risk : macroeconomic, social, business, financial, etc

* Probability distribution

(p. 233, p. 234 Table 8-1, p. 235, Figure 8-2)

Vs. Historical return data

Expected value vs. historical (=sample) average

Variance and standard deviation (p.236) vs. sample stat

Semi-variance

Coefficient of variation

Portfolio risk and return – define and measure

CML

* Variance (or Standard Deviation) for Total risk about our total wealth (team's performance)

versus Another risk for an individual asset as a part of your wealth (individual player's performance measured as his/her contribution to the team's performance: how to pick a player for your team-NFL draft?) => Concept of a portfolio

=> See p.242, Figure 8-4 for a complete diversification effect, the total risk is completely eliminated? Very rare, but can still get the picture about diversification or the risk offsetting effect like in Figure 8-5 on p.244

Then, how do you measure the risk contribution of each security? – Market risk measured by beta! - Systematic (market, non-diversifiable) vs. unsystematic (idiosyncratic, beta, individual security) risk: see fig 8-6 on 246 Which one is relevant risk?

Beta is to measure the systematic risk!

CAPM, SML (P. 240, P. 251 – P. 258)

Example on p.253

