

WMA

CERTIFICATE IN
WEALTH MANAGEMENT

Session 3 & 4 - Risks & Financial Mathematics

Presentation Order

- Systematic v/s Unsystematic
- Different Types of risk
- Risk Measurement Tools
- Time value of Money



Systematic
Risk

vs



Unsystematic
Risk

#1. Meaning



Risk/Threat
associated with the market or
the
segment as a whole.



Hazard
associated with specific
security, firm or industry.

#2. Impact



Large
number of securities in the
market.



Restricted
to the specific company or
industry.

#3. Controllability



Cannot
be controlled.



Controllable.

#4. Hedging



Allocation
of the Assets.



Diversification
of the Portfolio.

#5. Types



Interest
Risk and Market Risk.



Financial
and Business specific Risk.

#6. Responsible Factors



External.



Internal.

#7. Avoidance



Cannot
be Avoided.



Can
be avoided or resolved at a
quicker pace.

Types of risk an Investor Faces

Systematic Risk

Equity and Debt

- Inflation Risk
- Currency Risk
- Political Risk

Debt

- Interest Rate /
Reinvestment Risk

Unsystematic Risk

Debt

- Liquidity Risk
- Credit Risk

Equity and Debt

- Business Risk
- Operational Risk

Portfolio Risk

- Concentration Risk
- Horizon Risk
- Longevity Risk

Portfolio Level Risk

Concentration Risk

- Sector
- Security

Horizon Risk

Longevity Risk

Risk Measurement Tools

Risk Measurement Tools

Standard Deviation

Deviation from its own past standards

Higher the number more the risk

Applicable to Equity & Debt both

Beta

Measures risk compared a diversified equity index

Higher the number more the risk

Applicable to Equity

Risk Adjusted Ratio

Sharpe

$$\frac{\text{Portfolio Return} - \text{Risk Free return}}{\text{Std. Dev of the Portfolio Returns}}$$

Higher the number more superior the risk-adjusted returns

Applicable to Equity & Debt both

Treynor

$$\frac{\text{Portfolio Return} - \text{Risk Free return}}{\text{Beta of the Portfolio Returns}}$$

Higher the number more superior the risk-adjusted returns

Applicable to Equity

Alpha

$$\text{Portfolio Return} - \text{Index Return}$$

Higher the number better the performance

Applicable to diversified equity schemes



Financial Mathematics

Know your numbers



Thank You