



A T M E
College of Engineering



MASTER OF BUSINESS ADMINISTRATION

INVESTMENT ANALYSIS & PORTFOLIO MANAGEMENT

Subject Code – MBA FM314

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Module 2 – RETURN & RISK CONCEPTS

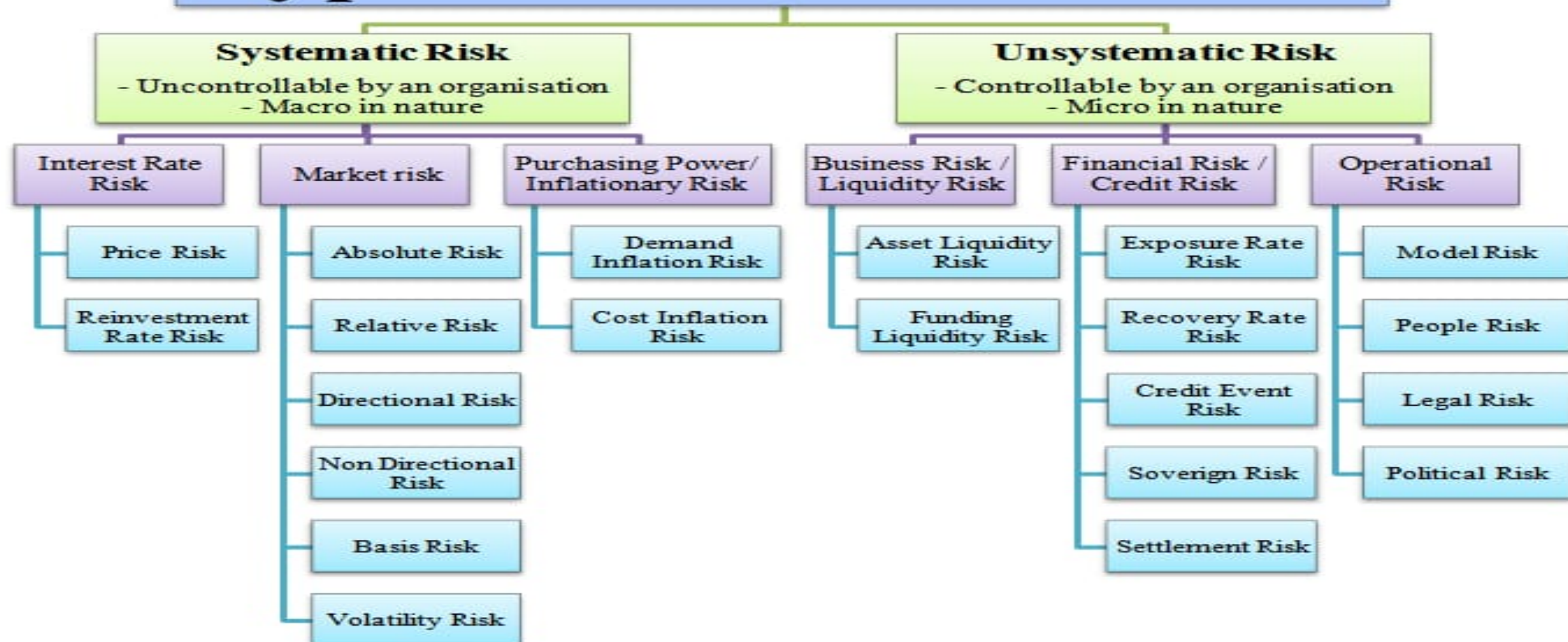
INTRODUCTION TO RISK

Risk has been defined in different manners, through the underlying concept remains the same .to have better understanding of the concept, some of the views are discussed in the following paragraphs:

In simple terms, risk may be defined as the possibility of suffering an injury or loss. It is present in every field or situation. In the context of 'Business or Financial World', it represents the uncertainty associated with an investment. In other words, risk is the possibility that the actual return on an investment may be different from the expected return.

According to Fischer and Jordon, risk is the, "The variability of return around the expected average is thus a quantitative description of risk".

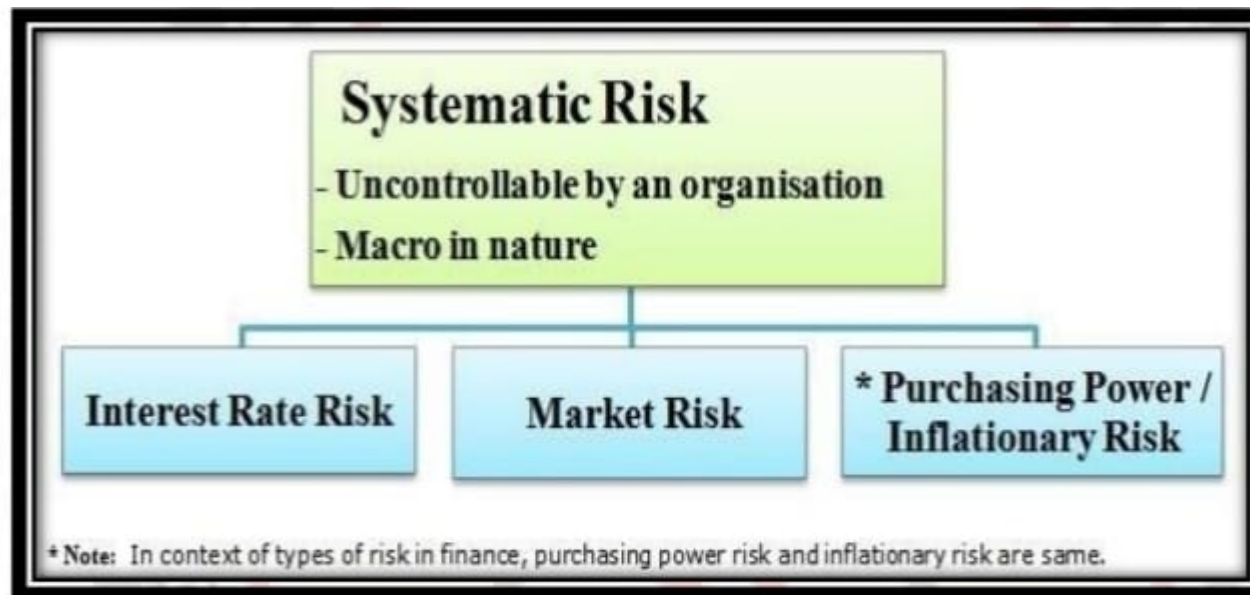
Types of Risk in Finance



SYSTEMATIC RISK:

Systematic risk is due to the influence of external factors on an organization. Such factors are normally uncontrollable from an organization's point of view. It is a macro in nature as it affects a large number of organizations operating under a similar stream or same domain. It cannot be planned by the organization. The types of systematic risk are depicted and listed below. Also called un diversifiable risk or market risk. A good example of a systematic risk is market risk.

A risk that is carried by an entire class of assets and/or liabilities, systematic risk may apply to a certain country or industry, or to the entire global economy.



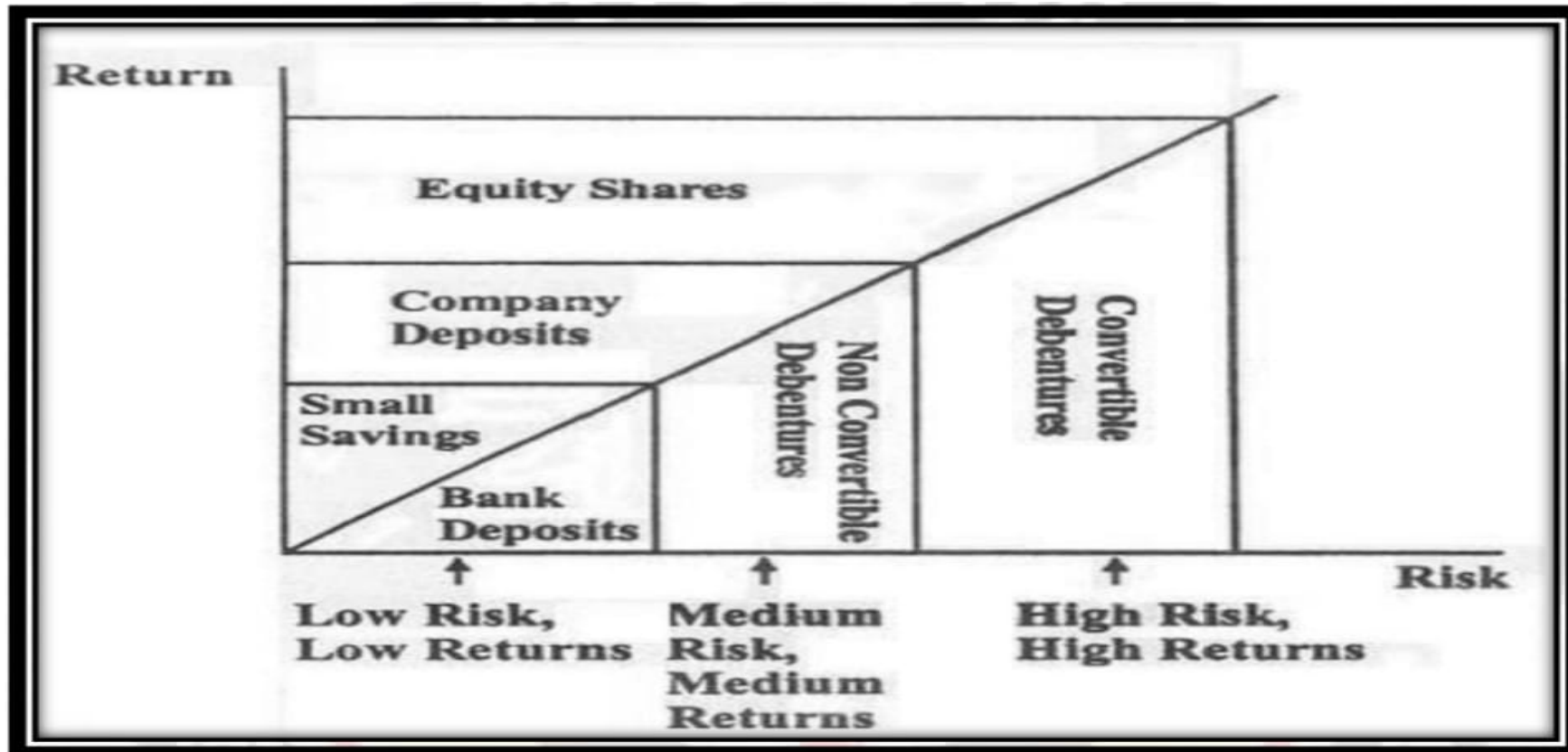
UNSYSTEMATIC RISK:

Unsystematic risk is due to the influence of internal factors prevailing within an organization. Such factors are normally controllable from an organization's point of view.

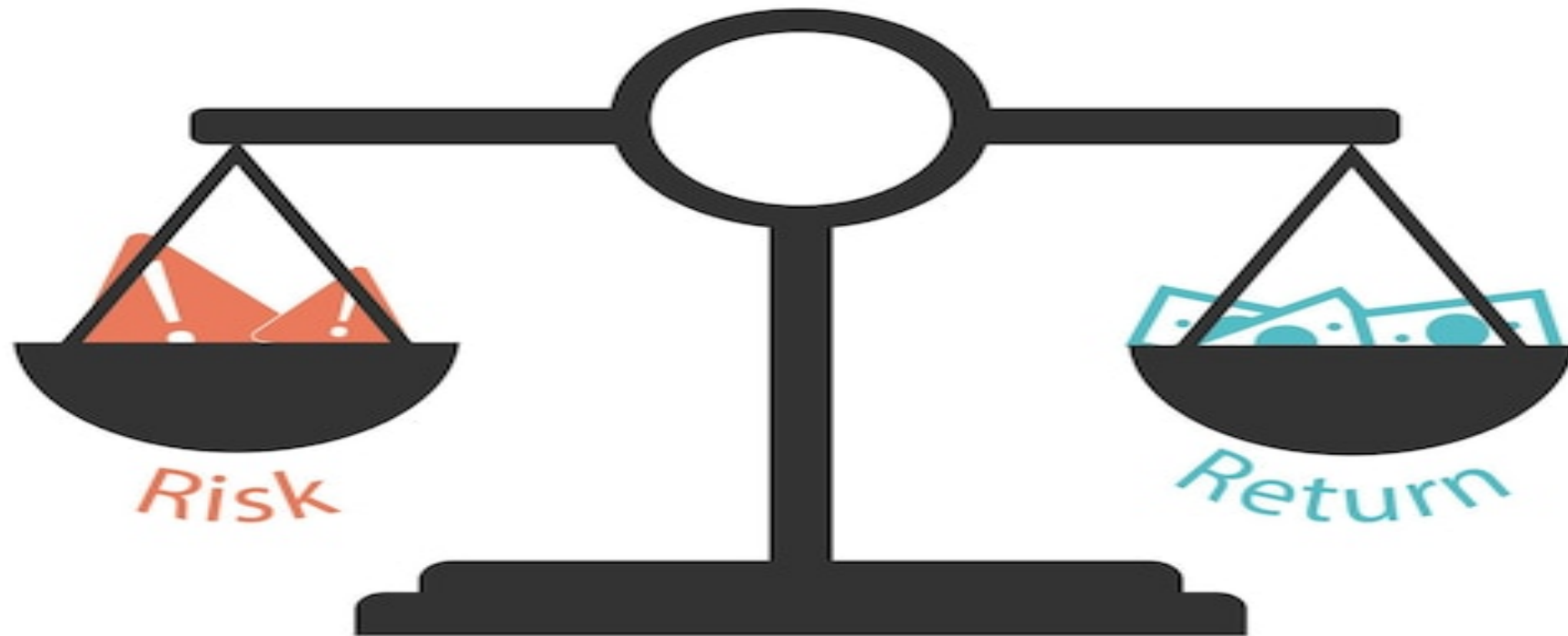
It is a micro in nature as it affects only a particular organization. It can be planned, so that necessary actions can be taken by the organization to mitigate (reduce the effect of) the risk.



RISK AND RETURN RELATIONSHIP :



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RISK-RETURN RELATIONSHIP

Risk : The risk-return relationship is a fundamental concept in finance that describes the correlation between the level of risk associated with an investment and the potential return or reward that investment might generate.

In general, the relationship suggests that higher potential returns are usually accompanied by higher levels of risk, and lower-risk investments tend to offer lower potential returns.

The risk-return relationship is essential for investors to make informed decisions aligned with their financial objectives and risk tolerance. It also serves as a foundation for portfolio construction and risk management strategies in the world of finance.

Volatility: Risk is often measured in terms of volatility or the degree of variation in the returns of an investment. High volatility indicates higher risk, while low volatility suggests lower risk.

Uncertainty: Risk is associated with the uncertainty of future returns. Investments with higher risk are more unpredictable, and there is a greater chance of experiencing losses.

Return: Profit Potential: Return refers to the potential gain or profit that an investor may earn from an investment. It is expressed as a percentage of the initial investment or as a monetary amount

Diversifiable Risk (Unsystematic Risk):

Diversifiable risk, also known as unsystematic risk or company-specific risk, and non-diversifiable risk, also known as systematic risk or market risk, are two components that make up the total risk associated with an investment portfolio. Understanding the distinction between these two types of risk is crucial for investors in managing their portfolios effectively.

Definition; Diversifiable risk is the portion of an investment's risk that can be eliminated through diversification. It is specific to individual assets or companies and is not related to broader market factors.

Causes: Diversifiable risk can arise from factors such as company management, industry conditions, competitive pressures, regulatory changes, and other company-specific events.

Reducibility: By holding a well-diversified portfolio that includes a mix of different assets, sectors, and industries, investors can reduce or eliminate diversifiable risk. The idea is that the positive performance of some investments may offset the negative performance of others.

Non-Diversifiable Risk (Systematic Risk):

Definition: Non-diversifiable risk is the portion of an investment's risk that cannot be eliminated through diversification. It is associated with broader economic, market, or systemic factors that affect all investments to some extent .

Causes: Non-diversifiable risk can result from factors such as interest rate changes, inflation, economic recessions, geopolitical events, and overall market trends.

Market Sensitivity: All investments are subject to non-diversifiable risk, and it is inherent in the overall market. It is the risk that remains even in a well-diversified portfolio because it is related to factors that affect the entire market.

Risk Factors: Examples of non-diversifiable risk factors include market risk, interest rate risk, and currency risk.

PROBLEMS ON RISK AND RETURN :

Consider the returns from a stock over 6 years' period. Calculate Expected returns and SD.

Period	R_i
1	15
2	12
3	20
4	-10
5	14
6	9

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The market price of a share is Rs.155. Following information is available about market condition, dividends and market price after one year. Find the expected returns of the share and the variability of the return.

Market condition	Probability	Market price (Rs.)	Dividend (Rs.)
Bullish	0.25	200	15
Stable	0.5	160	10
Bearish	0.25	150	5

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An equity share is priced at RS.50. The price at the end of the year and their probabilities are given below:

The company does not pay any dividend.

End year price (Rs.)	Probability
60	0.1
65	0.2
70	0.4
75	0.2
80	0.1

- What is the return that an investor can expect from his stock?
- Analyze the SD of the return
- Calculate the Co-efficient of variation.