# Capital Asset Price Model or Method:

This model describes the relationship between two terms:

* Expected Return
* Risk

## Expected Return:

Possibility or Probability of capital appreciation while investing in particular security. When an investor is investing in a particular security he expects that he receives some amount he expects that he receives some amount in future. (By investing in those securities) That amount is considered as expected Return

### The Securities and their Return

1. Equity Shares: In return the investor will receive share in residual profit or divisible profit.
2. Preference Share: In return dividend will be received.
3. Debenture: In return interest will be received on fixed rate basis.
4. Bonds: In this case, Return will be receiving on the basis of fixed coupon rate.

#### Difference Between Bonds and Debenture

|  |  |
| --- | --- |
| Bonds | Debenture |
| Issued by Govt. Sector and Financial institutes | By Private Sector |
| Coupon Rate | Interest Rate |
| Bondholder | Debenture holders |
| Non-transferable | Transferable |
| Less Risky | More Risky |
| More Marketable | Less Marketable |
| Less Liquidity | More Liquidity |
| Zero Coupon Bond (High Market Value) A particular type of bond in which coupon rate is Zero | Debenture are never issued at 0% interest Rate. |

## Risk:

Probability of earning profit or occurring loss in future while investing in a particular security.

Types of Risk

1. Systematic Risk (Uncontrollable / Wide): The risk that behave/arise in a particular way or manner, that’s why it is difficult to control due to external environment.

Features:

Wide, Uncontrollable, Unavoidable, Indirectly

#### Types of Systematic Risk:

Political, Legal, Social, Inflation, Technology, Internal Rate risk, International Business Risk

1. Unsystematic Risk (Specific Risk) : It does not behave in a particular way, that why it is easy to control. It arise due to internal (micro ) environment.

Features:

Narrow, Controllable, Avoidable, Directly

#### Types of Unsystematic Risk

Financial Risk, Liquidity Risk, Operational Risk, Credit Risk, Business Risk

## Difference Between Systematic and Unsystematic Risk

|  |  |
| --- | --- |
| Systematic Risk | Unsystematic Risk |
| * It arises on the account of economy with uncertainty and tendency of individual securities to move together with change in market. | * It is that part of risk which arises from uncertainties and which are unique to individual securities. |
| * Directly related with economy system of a country | * Not Directly with economic system, but directly related to business or a company |
| * Known as non-diversified/ Macro Economic/ Market Risk | * It is known as diversified Risk. |
| * We Cannot reduce this type of risk individually | * This type of risk can be reduced. |
| * Negative Correlated investment cannot eliminate the risk | * It is possible to reduce/eliminate risk by forming portfolio of Negatively correlated investment. |
| * Beta is a measure of systematic Risk | * It is a function of Macro-economic factors related with business. |

So we can analysis that CAPM Model helps in analyzing risk return relationship and pricing the securities.

It shows that the expected return on a security is equal to risk free return plus a risk premium, which is based on beta β of the security.

Below is the formula of CAPM:

where,

Ra = Annual Return (expected)

Rβ = Risk Free Return

Rm = Market Return

β = Risk Cofficient

(Rm – Rβ) = Market Risk Premium

##### Expected Annual Return:

Possibility or Probability of capital appreciation in an year while investing in particularly security

##### Risk Free Return:

* 1. The Return from Risk free investment is known as risk free return But in actual no security is risk free even if the risk is 0.001% there is a risk.
  2. The return should be in the form of currency cash flow.

#### Beta (β):

1. Beta β is a risk coefficient
2. The Degree of which a company’s equity return with comparison to the return of overall market.
3. Beta β is a function of Business risk and financial Risk.
4. Beta β is a measure of systematic Risk.