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**PAPER: FINANCIAL MANAGEMENT**

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**Q1: If the expected return is 9% and the standard deviation is 8.38%, what is the probability that return will be more than 10 percent? Also find the probability for return to be less than 40 percent.**

ANSWER:

R = 9%, S = 8.38%

For Probability that return will be 10% or more:

Z = $\frac{10\% - 9\%}{8.38\%}$ = $\frac{.10 - 0.09}{0.0838}$ = 0.1193 (value from Z table = 0.4602)

This means there is a probability of 46.02% that the return will be 9% or more

R = 9%, S = 8.38%

For Probability that return will be less than 40%

Z = $\frac{40\% - 9\%}{8.38\%}$ = $\frac{.40 - 0.09}{0.0838}$ = 3.699 (value from Z table =0.4602)

The Z table doesn’t have upper value then 3

**Keeping the current pandemic in mind, which type of risk i.e. systematic or unsystematic risk is faced by stocks traded on Pakistan Stock Exchange and why?**

**Systematic Risks:** Currently the systematic risks that are being faced by PSX (Pakistan Stock Exchange) the fluctuations in currencies and recessions are because of the current pandemic conditions businesses are at stand still in which marketers are facing huge problems which are leading markets toward a global recession and the second thing is that Pakistani currency is at very week position against the Dollar and in current condition Pakistani rupee is losing its value at very high pace which causing investors to lose their confidence thus bring the market to halt several times.

**Unsystematic Risks:** Also called unique risk it is either specific to a company, industry or a market in case of Pakistan Stock Exchange the problem it is right now facing is the shortage of money unlike many other countries where federal or central banks has issue billions of dollars at almost 0% interest rate to keep their markets stable Pakistan is unable to do it due to shortage of funds.

**Q#2: Consider two investment opportunities, A and B, whose normal probability distributions of one-year returns have the following characteristics:**

|  |  |  |
| --- | --- | --- |
|  | **Investment A** | **Investment B** |
| **Expected Return** | **0.09** | **0.20** |
| **Standard deviation** | **0.05** | **0.10** |

**Calculate coefficient of variation for both investment A and B. Identify which of the two investments is more risky and why?**

|  |  |  |
| --- | --- | --- |
| Investment | A | B |
| Expected Return | **0.09** | **0.20** |
| Standard Deviation  | **0.05** | **0.10** |
| Co-efficient Of Variation | **0.55** | **0.5** |

Investment **A** is more risky then B as the CV value for a is **greater** than that of B

**Briefly explain the difference between the characteristic line and security market line.**

**Characteristic Line**: A characteristic line is a straight line formed using regression analysis that summarizes a particular security's [systematic risk](https://www.investopedia.com/terms/s/systematicrisk.asp) and rate of return. The characteristic line is also known as the security characteristic line (SCL). The characteristic line is created by plotting a security's return at various points in time.

**Security Market Line**: The security market line is commonly used by money managers and investors to evaluate an investment product that they're thinking of including in a [portfolio](https://www.investopedia.com/terms/p/portfolio.asp). The SML is useful in determining whether the security offers a favorable expected return compared to its level of risk. The security market line (SML) is a line drawn on a chart that serves as a graphical representation of the [capital asset pricing model (CAPM)](https://www.investopedia.com/terms/c/capm.asp)—which shows different levels of systematic, or market risk, of various [marketable securities](https://www.investopedia.com/terms/m/marketablesecurities.asp), plotted against the [expected return](https://www.investopedia.com/terms/e/expectedreturn.asp) of the entire market at any given time.

**Q#3 PART A: Keeping the pros and cons of different goals in mind, what should be the ultimate goal of a firm? Give reasons for your answer.**

These are the five main ultimate goal of the firm

1. The Production Goal.
2. The Inventory Goal.
3. The Level of Sales Goal.
4. The Market-share Goal.
5. The Profit Goal.

The goals of the firms vary widely as every firm has its own objective upon which they operate their business large firms often have individuals or the whole department in which there main job is making pricing decisions the one main goal which almost every firm follows is the creation of market value of the firm. Higher the market value of the firm meaning more people want to do business with it and in it.

Creating a good market value means that the company is in the good hands of the investors of that specific industry. This also means that company produces comparatively more profit then industry average.

**PART B: Why do agency problems arise? How can they be avoided?**

Sometimes management of firm have different goals then what the firms shareholder wants them to follow this give arise to conflict know as agency problem. These problems mainly arise because the firms operations are not run by its shareholders rather the management which act as the agent of the shareholders, but some time they deviate from their path.

This type of problem can be avoided through having good interpersonal relationships between the management and shareholders, providing extra incentives to the company’s management. And having great relationships towards them to keep the industries working. It can also be avoided by limiting the amount of decision making capability of the firm management and through strict auditing of all financial reports.