

## FIN ZG518 Assignment-S2(2022-23)

**Assignment Part A** – Everyone has to take Four Domestic Asset (Stocks/Bonds/Currency/Commodity Derivatives -) You need to make a portfolio of 4 assets or stocks with equal weights.

**Note:** Assets can be complete domestic. You can also take Four stocks/Bonds/Derivatives/or Mix of all these asset classes for one-year time period from NSE/BSE/Yahoo finance.

Calculate the Portfolio Return, Risk (Standard deviation) and Sharpe ratio for selected **time** horizon (one year). By using the Solver tool in MS Excel, calculate optimal weights by maximising Sharpe ratio. Optimization process in MS Excel solver must be done by maximising the Sharpe ratio.

**Assignment Part B** - Everyone has to take Four International Assets (Stocks/Bonds/Currency Derivatives /Commodity Derivatives-) You need make a portfolio of 4 assets with equal weights (Assets may be all international stocks (or) all Bonds (or) all Derivatives (or) Mix of Bonds, stocks and Derivatives for one- year time period.

Again Calculate the Portfolio Return, Risk and Sharpe ratio for selected **time** horizon (one year). By using the Solver tool in MS Excel, calculate optimal weights by maximising Sharpe ratio. Optimization process in MS Excel solver must be done by maximising the Sharpe ratio.

**Assignment Part C** – Consider two assets with higher weights from Domestic assets and two assets with higher weights from Foreign assets. Calculate the Portfolio Return, Risk and Sharpe ratio for selected portfolio. By using the Solver tool in MS Excel, calculate optimal weights by maximising Sharpe ratio. Optimization process in MS Excel solver must be done by maximising the Sharpe ratio.

Note: if you get only one asset in optimal weights, you should try with other assets till you get two assets with positive optimal weights. Same Time period for PART A and B (Slight change up to three months' variation is acceptable)

**Final Report** – Final report preparation with findings of Part A, B & C, and comparison of Domestic, International Portfolio & Combined Portfolio returns, weights, standard deviations with final concluding remarks.

### Guidelines:

- Each individual must contribute. (Individual Assignment)
- Submission format:

- MS Excel workbooks which contains data and calculations in different worksheets – Domestic Portfolio – **PART A.**
- MS Excel workbooks which contains data and calculations in different worksheets – International Portfolio – **PART B.**
- MS Excel workbooks which contains data and calculations in different worksheets – Combined Portfolio – **PART C.**
- MS Word file- Report which contains your observations, comments and Final conclusions – **Part D.**
- Submit all files in zip file.

**Submission Date:** Submit your assignment in **elearn portal by 11:59 pm, 16<sup>th</sup> April, 2023.**

**Academic Honesty and Integrity Policy:** *Academic honesty and integrity are to be maintained by all the students and no type of academic dishonesty is acceptable.*