# PORTFOLIO ASSESSMENT AND RISK EVALUATION

There are three methods of evaluating the VaR (Value at Risk) for the assets in question

1. Historical simulation using the Probability & Confidence Intervals
2. Monte-Carlo simulation
3. Variance and Co-Variance e.g., the [Portfolio Variance](https://corporatefinanceinstitute.com/resources/knowledge/finance/portfolio-variance/)

# CASE STUDY

Given the 5-year yields from 1953 to 1994 compute the portfolio VAR as of Dec 1994. The risk measured over a monthly basis at the 95% level. Report the distribution and compute the VAR

1. Using the Normal distribution for the Yield changes (Delta-Normal Method) and 12-month Moving average model for the volatility of yield changes

References

1. LinkedIn <https://www.linkedin.com/pulse/calculation-var-delta-normal-method-kanika-malik/>
2. Actual distribution for the Yield Changes (Historical-Simulation method) for the past available data.

Compare and discuss the Yield changes between 1 and 2.

Hint: Consider the Yield changes as if they were log returns

More reading

1. VAR Disaggregation Marginal and Component VaR <https://riskprep.com/tutorials/var-disaggregation-marginal-and-component-var/>
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