Project 2  
Historical Variance, Beta Coefficient, Greek Letters, Implied Variance, and Option Pricing Valuation

A. Introduction

B. Statistical Analysis of Rates of Return for XYZ company and Market Rates of Return

1. Means, variances, skewnesses, and kurtoses

2. Coefficient variations

3. Two alternative optimal portfolios in terms of two securities using the methods below.

C. Beta Coefficient and Cost of Equity for XYZ Company

1. Use regression analysis to calculate Beta coefficients for XYZ Company

2. Calculate the cost of capital for XYZ Company

a. DCF approach

b. CAPM approach

D. Option Pricing Valuation for XYZ Company

1. Manual Calculation of Call and Put Options

2. EXCEL Calculation of Call and Put Options

E. Greek Letters Calculations and Applications for XYZ Company

F. Implied Variance Estimation and their Application

G. Summary and Concluding Remarks

References