



FIN 470 – Financial Analysis in Excel Group AI Assignment 2 Times Series Prediction

This AI assignment must be done as a group, and all group members (unless there are unusual circumstances) will receive the same grade. The assignment must be uploaded to the D2L folder by the due date listed on the course schedule. Use the following title: “FIN 470 AI Ass. 2, Group X”. Upload ONLY ONE assignment per group. All prompts (including the names of the AI models used) and (unedited) completions should be included in an appendix.

AI Assignment 2: Times Series Prediction Assignment Overview

In this assignment, you will compare the effectiveness of traditional time series forecasting methods against AI for predicting seasonal financial data.

1. Traditional Forecasting

Use your Holt-Winters Exponential Smoothing results from the Group Assignment 4, Time Series Forecasting as your benchmark for traditional forecasting. Specifically, use Mean Squared Error (MSE), Mean Absolute Error (MAE), and Mean Absolute Percentage Error (MAPE) as measures of accuracy.

2. AI-Enhanced Forecasting

1. Upload the same dataset
2. Use a prompt to get your AI model to predict the time series
3. Calculate the MSE, MAE, and MAPE
4. Try different prompts to obtain the lowest possible error

3. Analysis and Comparison

Prepare a report that includes:

1. Visual comparison of forecasts from both methods
2. Quantitative comparison of accuracy metrics
3. Analysis of when each method performs better/worse
4. Discussion of practical implications for business decision-making
5. Recommendations for which method to use in different scenarios