FIN5ALS Assignment 2

Hedge Funds Pricing

Background

This exercise aims at help students build up analytical skills and understand the regression methodology presented in the paper by Woodward. Unlike mutual funds, hedge funds feature flexible investment strategies, similar to venture capital. In terms of regulatory supervision for hedge funds, performance and money flow disclosure are not compulsory. Accordingly, researchers suggest that the publically available return data for hedge funds are not very accurate. Similar to venture capital, the data are subject to problems such as stale pricing or management pricing. Quite a few papers examine the issue of performance measure and stale pricing for private equity. Read the references listed below and review the notes of the lecture in week 9. It will help you accomplish this task.

Assignment task

As a financial analyst, you are required to investigate how whether there exists **stale** pricing and **managed** pricing of hedge funds with different strategies.

- Download the xls files that contain the time series return data of 5 hedge fund indices since 1990.
- Check the strategy definition for each hedge fund indices from https://www.hedgefundresearch.com/
- Download from yahoo finance the S&P index and use it as a proxy for the market.
- Describe the return data using basic statistics, e.g. mean, median, standard deviation, kurtosis, skewness, correlation. This will be reviewed in part in our **week 9 tutorial**.
- Use hedge fund returns as dependent variable and the lagged market returns as the independent (explanatory) variables. Specify a linear regression model (set number of lags to be 3). You need to explain the model, i.e., why you choose this model to detect the pricing issue.
- Perform the regression using excel and interpret the results. **Week 10 tutorial** will help on issues on doing regression using excel.
- You are suggested to state your data statistics and regression results in tables and plots.

Examples of other issues that can be discussed in your assignment include:

- Discuss the literature on the stale pricing and relate it to regulatory issues of hedge funds
- Describe the data using basic statistics (e.g. mean, median, skewness, kurtosis, ANOVA, or other distribution measures)
- Following lecture slides, present your model that applies to each of the hedge funds indices
- Run regression for each hedge fund indices and report in a formal table.
- Interpret the results with significance demonstration
- How do you relate your regression results to the issue of stale pricing and managed pricing?
- Compare the regression results for different strategies and discuss the results. Align your findings with the features of different hedge fund investment strategies.

Other General instruction

- The word limit is 2000, excluding tables and figures.
- This is a group assignment with a maximum of 3 students in each group.
- The assignment is due at (by Thursday, week 13 lecture time).
- The assignment comprises 10% of your final score.

References:

Anson, Mark J.P. (2006). Handbook of Alternative Assets. John Wiley & Sons Inc. New Jersey. Chapter 21.

Anson, Mark J.P. (2007). Performance Measurement in Private Equity: Another Look. The Journal of Private Equity.

Woodward, S. E. (2004). Measuring Risk and Performance for Private Equity. Sand Hill Econometrics working paper.