

## Comments

### Benchmark Analysis:

- **Tracking Error** - The tracking errors for funds 1 & 2 are within the typical bounds of an enhanced index fund at between 1%-2% and thus are acceptable, whereas the tracking error for fund 3 is high at over 2%.
- **Information Ratio** - The information ratios of all of the funds are quite low at under 0.40.
- **Beta** - The beta of fund 1 is low at under 1. The beta for fund 2 is also low at under 1 but is nearing 1. And the beta for fund 3 is acceptable at slightly over 1.

### Factor Model:

- **Alpha** - The annualized alphas for funds 1 & 3 are above zero and therefore acceptable, whereas the alpha for fund 3 is negative.
- **Alpha t-Stat** - The t-statistic for funds 1 & 3 are positive indicating that the estimate is greater than the null hypothesis, whereas the t-statistic for fund 2 is negative indicating that the estimate is less than the null hypothesis value.
- **Developed Market Beta** - The low and negative developed market beta indicates a weak inverse correlation between the market and the funds..
- **Developed Market t-Stat** - In this specific case, the t-statistic is negative, which means that the estimate is less than the null hypothesis value.
- **Developed Size Beta** - The developed size beta indicates a weak inverse correlation in the size of portfolios and the funds.
- **Developed Size t-Stat** - In this specific case, the t-statistic is negative, which means that the estimate is less than the null hypothesis value.
- **Developed Value Beta** - The developed value beta indicates a weak positive correlation in the value of portfolios and the funds.
- **Developed Value t-Stat** - In this specific case, the t-statistic is positive, which means that the estimate is greater than the null hypothesis value.

- **Adjust R Squared** - In the context of explaining fund returns the R-squared value suggests that the Fama-French 3 factor model explains a moderate proportion of the variation in the fund returns.