Meeting Minutes

PWC ILab Teams Meeting on 12.02.2024, 11:00am

Agenda:	Code Adjustments and first Visualizations of Outputs
Participants:	PWC: Christian Koellich, Florian Moemken, WU: Florian Pauer, Lukas Handler, Students: Arina Suhodolova, Sophie Grill, Alexei Volodin, Dinara Zainullina, Sebastian Herzog
Last Meeting:	26.01.24 at 11:30am
Next Meeting:	Online Teams Meeting on 08.03.24 at 11:30am

Presentation of code adjustments and improved visualizations

Team

- Included BAMLC0A1CAAAEY (HY) and BAMLH0A0HYM2 (AAA) as credit index time series
- Included Fama-French Factors to PCA – turned out insignificant in all regressions
- Included presentation slide for comparison of rolling PCA with a 80 window size, a 423 window size and a 770 window size for PCA on averages of each asset class
- Conducted univariate regressions on significant macro variables
- Included factor loadings and the visualization of them
- Included drop-down menu for the visualization of standardized time series
- Included Box-Whiskers plots for Summary Statistics visualization
- Visualized Time Series together with explained variability of the Principal Components

Suggestions and Adjustments to be made

Koellich

- Add currency index (DXY) + other indices for euro and asian currencies
- Add multivariate regression (based on the variables that we used for univariate regressions)
- Split the variance time series so we have different regressions for each time split
- For PC1 take the average and focus on the observations which are one standard deviation away from the mean, for example +-100 observations from the outlier point and try to run a regression on this smaller data set
- Extract loadings for significant variables and retrieve a significant dataset using the loadings and PC, which we can use for further analysis and forecasting