

Meeting Minutes

PWC ILab Teams Meeting on 07.12.2023, 10am

Agenda: Presentation of the Rolling PCA approach and further Questions
Participants: PWC: Christian Koellich, Florian Moemken,
WU: Florian Pauer, Lukas Handler,
Students: Arina Suhodolova, Sophie Grill, Alexei Volodin,
Dinara Zainullina, Sebastian Herzog
Last Meeting: 24.11.23 at 9am
Next Meeting: Online Teams Meeting on 22.12.23 at 9am

Presentation of our Rolling PCA Approach

- Team*
- Introduction of our extended dataset: we introduced 28 additional commodity indices.
 - All of them are related to the commodities mentioned by Fenn et al. (2011). We transformed the daily data in quarterly returns such that they fit our initial time windows.
 - We tested multiple windows to gauge where the PCA1 value is the highest. The performance was best with overlapping windows of 40 observations.
 - Amended to our code we provide confidence intervals justifying the robustness of our analysis.

Open Topics and Adjustments to be made

- Koellich*
- Additional data to Include:
- Diversified equity indices for US and European securities
 - Spread indices for US and European credits and government bonds.
 - Further adjustment on the time window for the rolling analysis
 - Analysis of the correlation matrix: is it random or does it entail valuable information?
 - Including macroeconomic data

Presentation requirements for the next meeting

- Koellich*
- Detailed slides on all topics in the high-level roadmap I-II
 - Slides set which explains our methodological approach including an in depth explanation of the statistical methods we used
 - Slides explaining potential noise or information in the correlation matrix