



UNIVERSITÀ
DEGLI STUDI
DI PADOVA

UNIVERSITÀ DEGLI STUDI DI PADOVA

MASTER DEGREE COURSE IN COMPUTATIONAL FINANCE

REGRESSION AND TIME SERIES MODELS

Group Work 1 - Regression with CAPM Model

Created by:

Martina Arrighini, 2149799, martina.arrighini@studenti.unipd.it

Luigi Babiski Arruda, 2031997, luigi.babiskiarruda@studenti.unipd.it

Giorgio Cottini, 2140740, giorgio.cottini@studenti.unipd.it

Enrico Paciaroni, 2139678, enrico.paciaroni@studenti.unipd.it

Commissioned by:

Prof. Massimiliano Caporin

A.Y. 2024/2025

Assignment 1

Assignment 2

Assignment 3

Assignment 4

Assignment 5

Assignment 6

Assignment 7

Appendix

Summary of Group Members' Contribution

Martina Arrighini:

Luigi Babiski Arruda:

Giorgio Cottini:

Enrico Paciaroni:

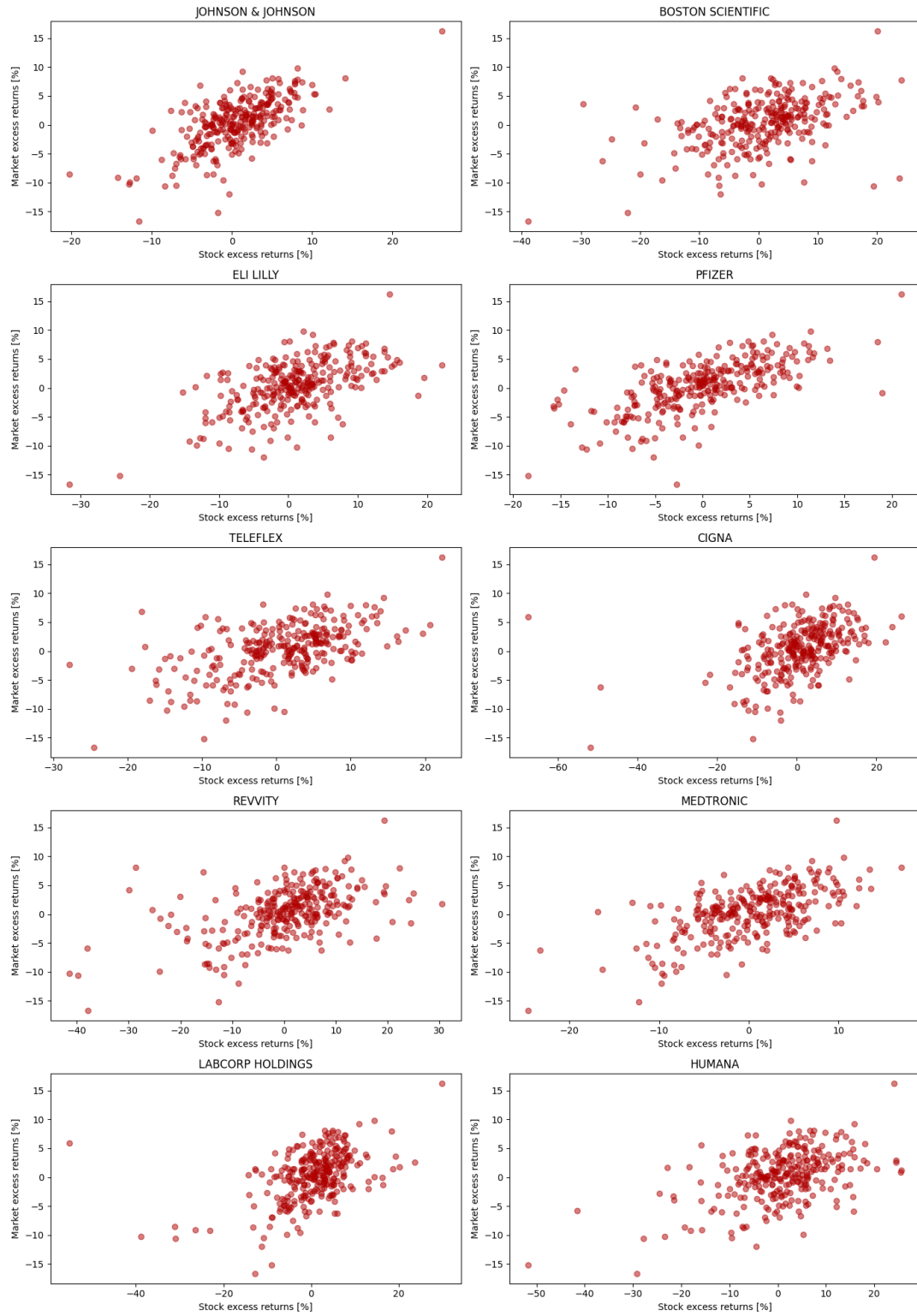


Fig. 1: Scatterplot of equities' log-returns against excess market returns.

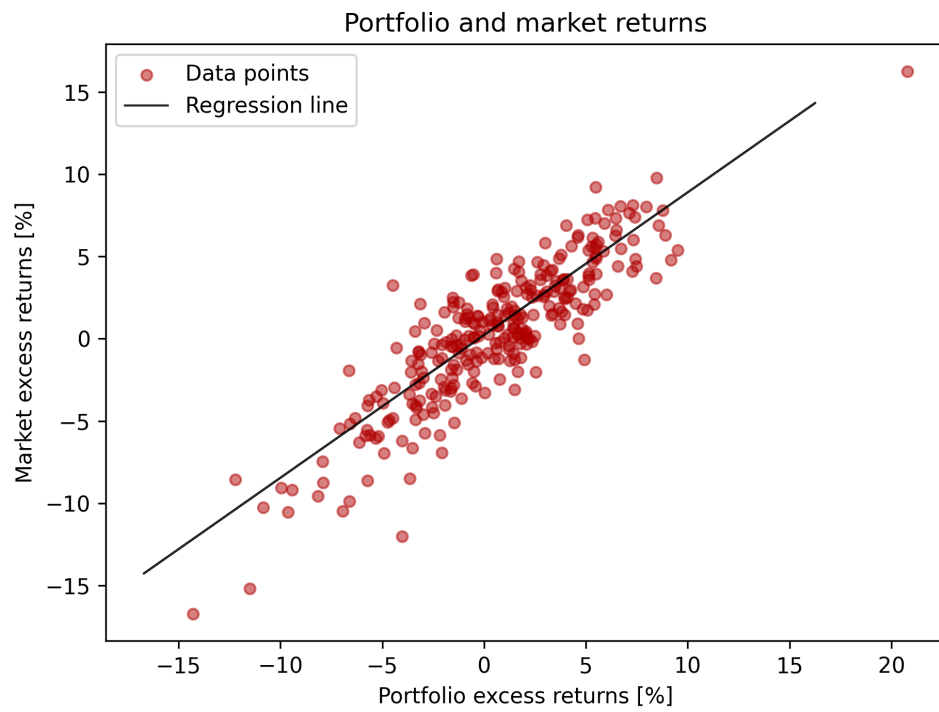


Fig. 2: Scatterplot of portfolio's returns against excess market returns, with linear regression.

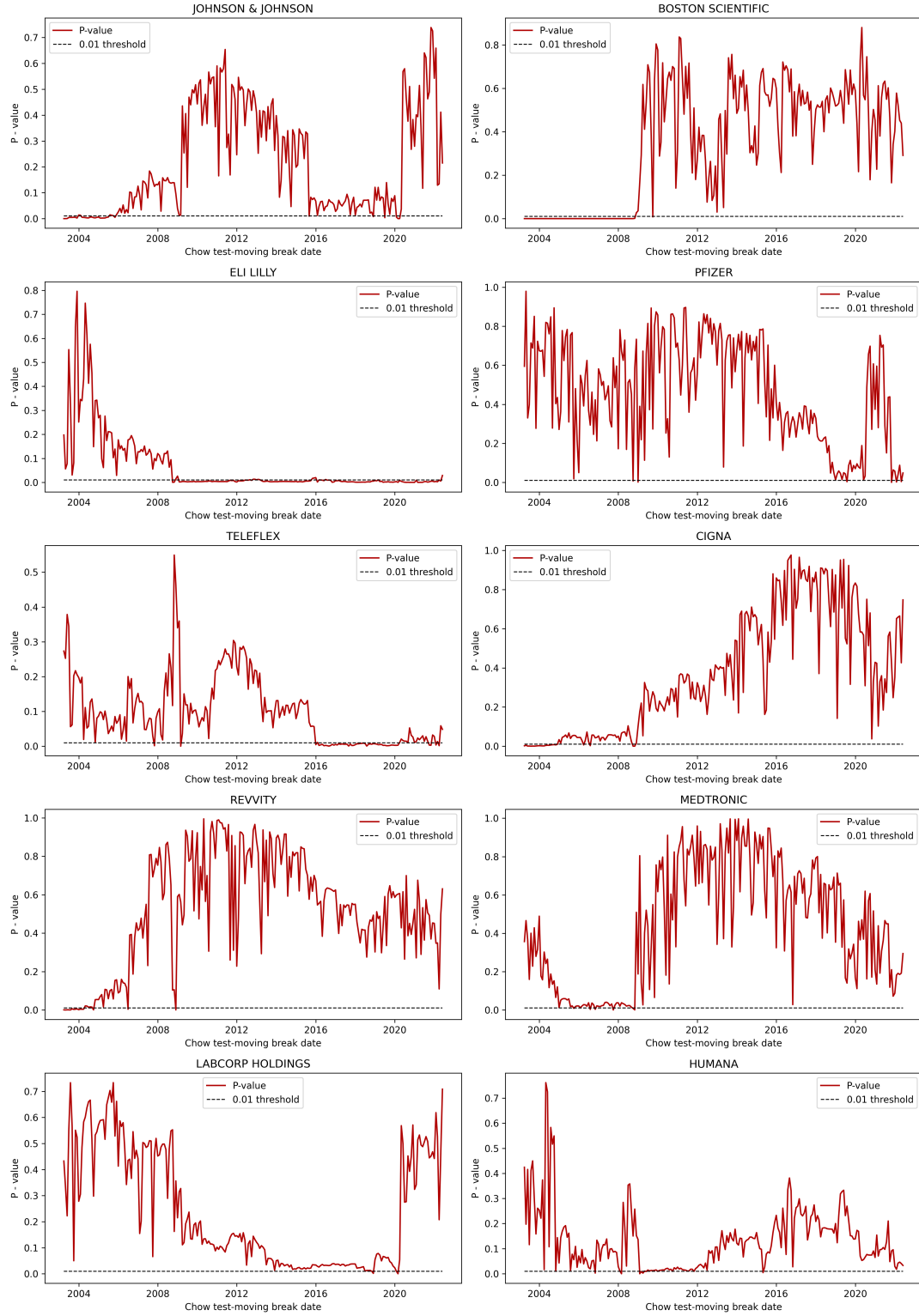


Fig. 3: Chow Test performed for all equities in search of structural breaks.

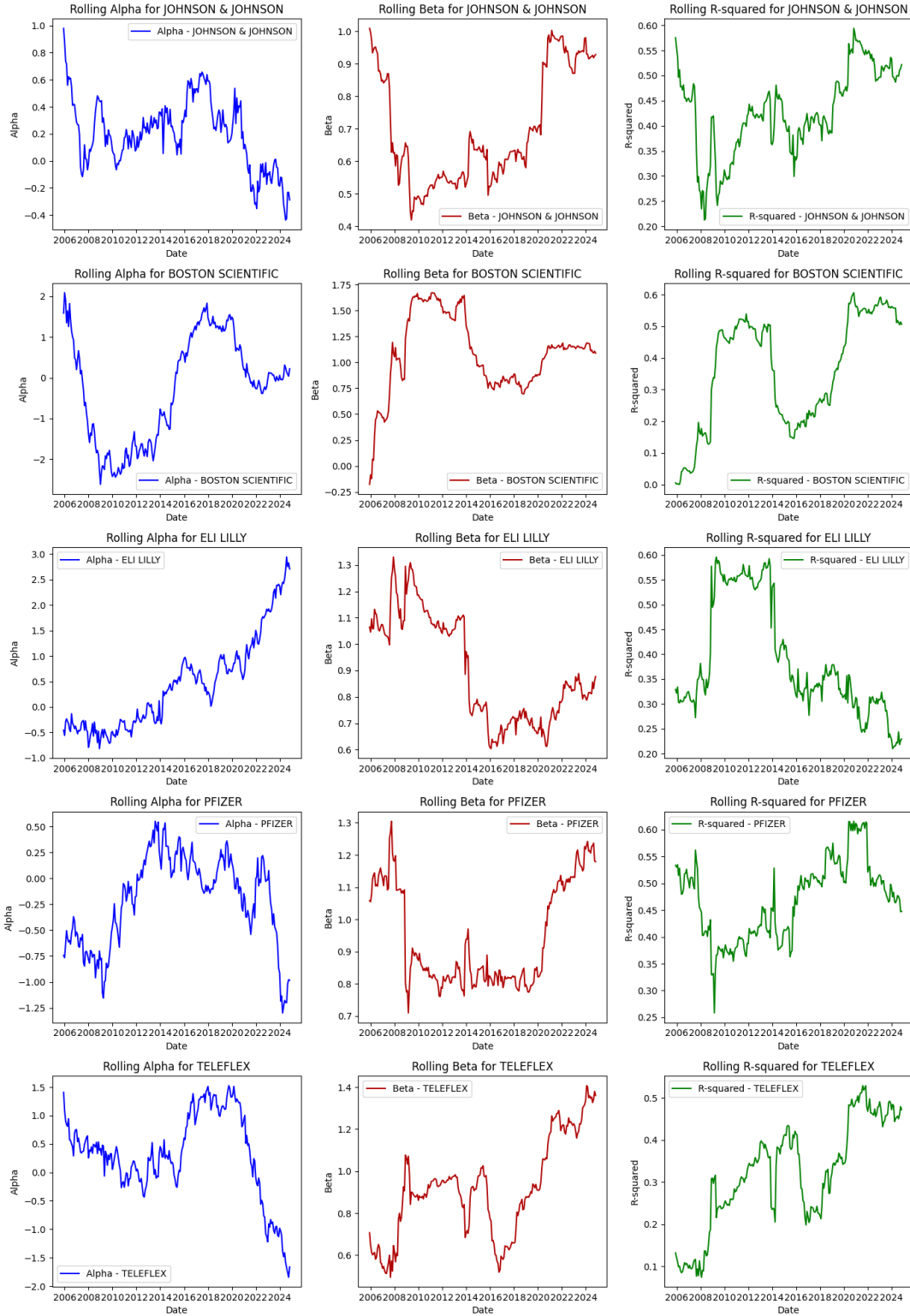


Fig. 4: Rolling quantities computed on all equities as an alternative of the Chow Test in search for structural breaks (1).

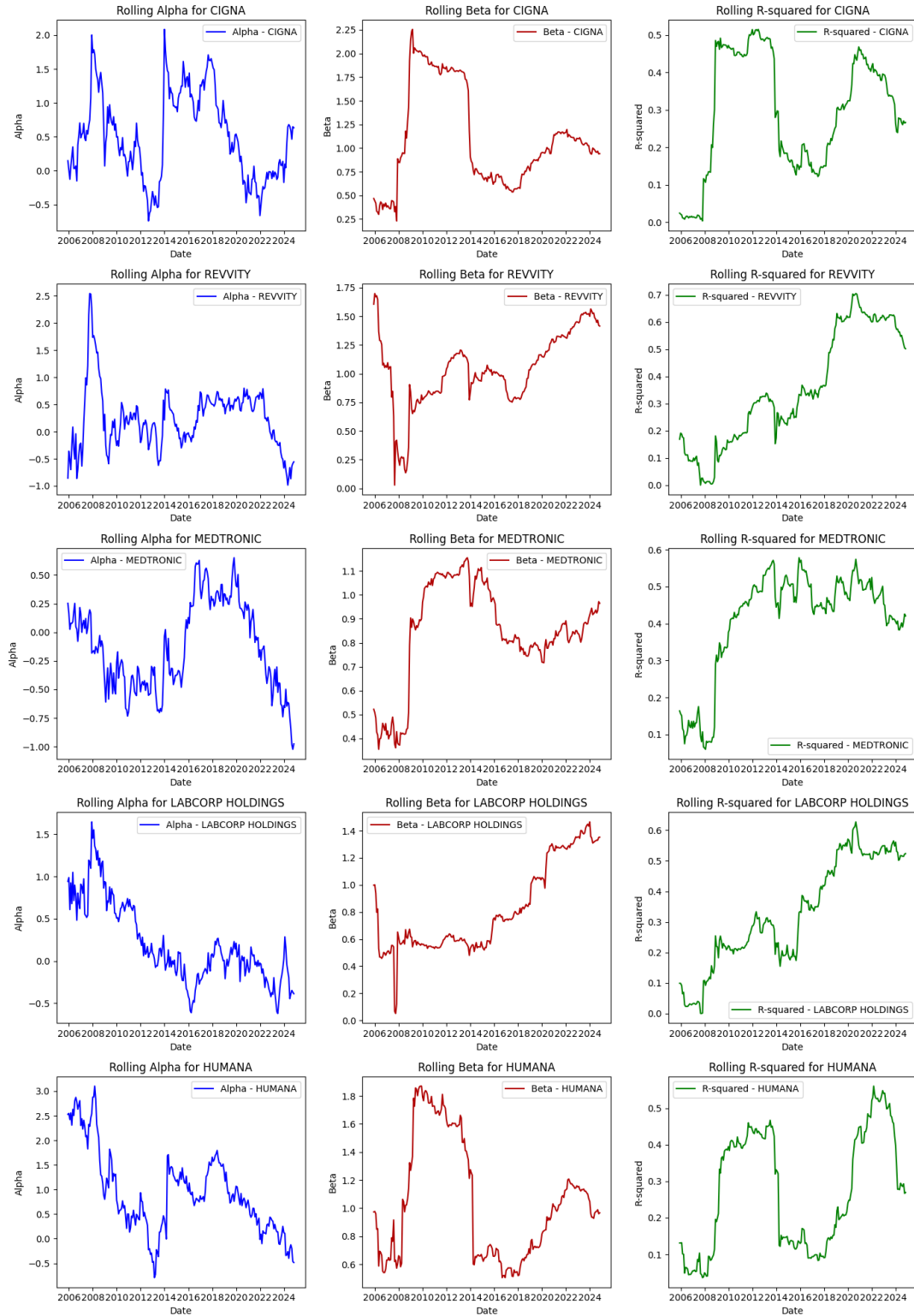


Fig. 5: Rolling quantities computed on all equities as an alternative of the Chow Test in search for structural breaks (2).

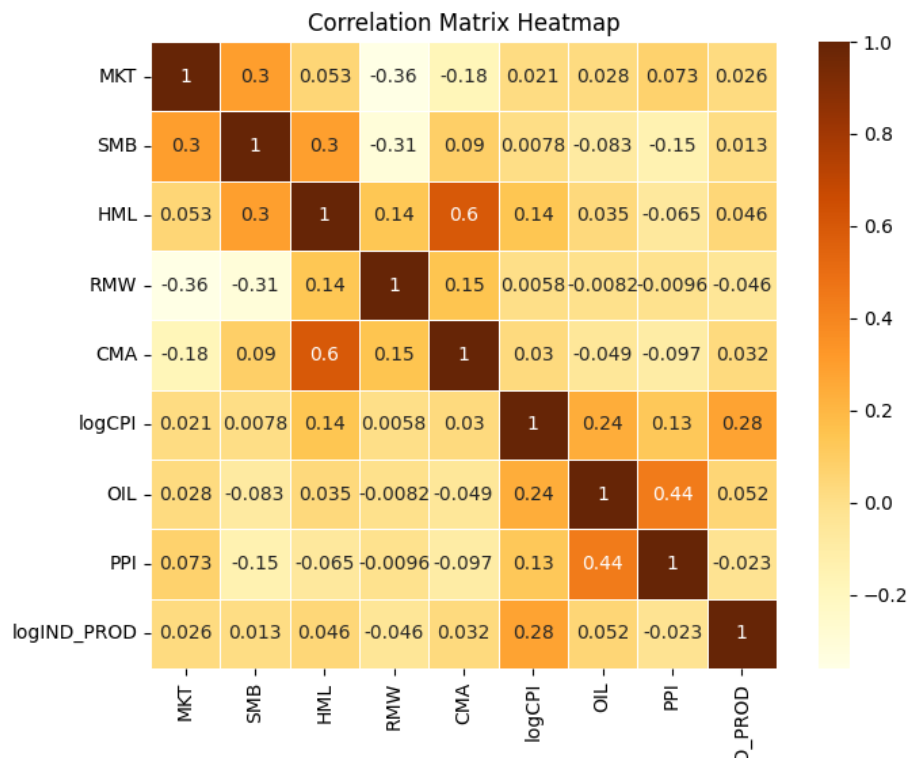


Fig. 6: Heatmap of the correlations between the chosen explanatory variables.