## Assignment 5

Applied Financial Econometrics Lecturer: Axel Araneda, PhD. Masaryk University Autumn 2022

- 1. Download the daily historical price for the last 5-10 years for a stock of your interest plus S&P-500.
- 2. Fit the best ARIMA for the two assets.
- 3. Evaluate the presence of heteroskedasticity by the Engle LM-test on the residuals.
- 4. Fit a GARCH(1,1) and E-GARCH(1,1) model for the time-series.
- 5. In the case of S&P-500 compare your conditional volatility estimation with the VIX index (just a simple comment).

You should deliver R code + Answers (for example Power Point) via IS by the end of the seminar