

1

Data and methodology

1.1 Data

Here comes text...

1.1.1 Descriptives

Table of summary statistics

Here comes a table and description of the stats

Correlation

Here comes a table and description of the correlations

Visualizations (eye-balling)

Figure 1.1: EuroStoxx 50 price and price log return evolution

Notes: This figure plots the price and price log return respectively for the EuroStoxx 50 index

As can be seen

1.1.2 Methodology

Here comes text...

As already mentioned in ..., GARCH models sGARCH, eGARCH, iGARCH, gjrGARCH, nGARCH, tGARCH and tsGARCH will be estimated. Additionally the distributions will be examined as well, including the normal, student-t distribution, skewed student-t distribution, generalised error distribution, skewed generalised error distribution and the skewed generalised Theodossiou distribution.

They will be estimated using maximum likelihood. Fortunately Alexios Ghalanos [1] has made it easy for us to implement this methodology in R, which gives us a bit more time to focus on the results and the interpretation.

Let's add an image:

```
# knitr::include_graphics("figures/sample-content/captain.jpeg")
```

References

- [1] Alexios Ghalanos. *rugarch: Univariate GARCH models*. R package version 1.4-4. 2020.