

# **Volatility Modeling: HAR & GARCH Models**

A comparative study in forecasting accuracy

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# Machine Learning Project For M2 EKAP

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# Chapter 1

## Some small hints

### 1.1 German Umlauts and other Language Specific Characters

You can type german umlauts like 'ä', or 'ö' directly in this file. This is also true for other language specific characters like 'ü'.

There are problems with automatic hyphenation when using language specific characters and OT1-encoded fonts. In this case, use a T1-encoded Type1-font like the Latin Modern font family (`\usepackage{lmodern}`).

### 1.2 References

Using the commands `\label{name}` and `\ref{name}` you are able to use references in your document. Advantage: You do not need to think about numerations, because L<sup>A</sup>T<sub>E</sub>X is doing that for you.

For example, in section ?? on page ?? hints for dividing large documents are given.

Certainly, references do also work for tables, figures, formulas...

Please notice, that L<sup>A</sup>T<sub>E</sub>X usually needs more than one run (mostly 2) to resolve those references correctly.

### 1.3 Dividing Large Documents

You can divide your L<sup>A</sup>T<sub>E</sub>X-Document into an arbitrary number of T<sub>E</sub>X-Files to avoid too big and therefore unhandy files (e.g. one file for every chapter).

For this, you insert in your main file (this one) for every subfile the command `'\input{subfile}'`. This leads to the same behavior as if the

content of the subfile would be at the place of the `\input`-Command.

## List of Figures

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