

2nd set SAS assignments

For the current and the coming SAS exercises: *Get familiar with the included SAS Help function and the SAS Online Tutorial which can be found here:*

<http://support.sas.com/onlinedoc/913/docMainpage.jsp>.

1. Working with data

- i) Create a library named *saskurs* pointing to a directory of your choice.
- ii) Import the dataset `stockprices.xls` with `PROC IMPORT` into your library call it `stockprices`.

Hint `PROC IMPORT`: Use SAS help. See `PROC IMPORT Statement`. Define in the procedure `datafile`, `out` and the options `replace` and `DBMS`.

- iii) Use a data step and format the variable `DATUM` as `date8..` Label the variables:
 - DAX: DAX Index
 - BAS: BASF Stock Price
 - BAY: Bayer Stock Price
 - HOE: Hoechst Stock Price
 - CBK: Commerzbank Stock Price
 - DBK: Deutsche Bank Stock Price
 - DRB: Dresdner Bank Stock Price
- iv) Make use of a data step to create a series of the lagged price for each stock (use function `lag()`) and calculate the log-return for each stock price series (use function `log()`). Drop the lagged prices from the dataset. **Hint:** Use a macro to avoid a too long code.
- v) Choose a return series and/or a price series and plot them. (Use `PROC GPLOT` and have a look at the help program from the course webpage!) **Hint:** Write a macro that is flexible regarding the plotted variable (=return or price) and the stock.

- vi) Create a data set from `stockprices` that contains the first or the last observation of each year. Hint: `dat_year=year(datum);`. Sort the data by `datum`. Then use a data step with a `by` statement, as `by dat_year datum;` and `first.dat_year` or `last.dat_year`.
- vii) Export the data set from vi) into a `.txt` file with `PROC EXPORT`. Hint `PROC EXPORT`: Use SAS help. See `PROC EXPORT Statement`. Define in the procedure `DATA`, `OUTFILE` and the options `REPLACE` and `DBMS`.