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:*


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 GLOT 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: \texttt{dat\_year}=\texttt{year(datum)}; Sort the data by \texttt{datum}. Then use a data step with a by statement, as \texttt{by dat\_year datum;} and \texttt{first.dat\_year} or \texttt{last.dat\_year}.

vii) Export the data set from vi) into a .txt file with \texttt{PROC EXPORT}. Hint \texttt{PROC EXPORT}: Use SAS help. See \texttt{PROC EXPORT Statement}. Define in the procedure \texttt{DATA, OUTFILE} and the options \texttt{REPLACE} and \texttt{DBMS}. 