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

   Hint: Use a macro for labeling the stocks to avoid a too long code.

   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 \texttt{PROC G PLOT}) \textbf{Hint:}

Write a macro that is flexible regarding the plotted variable (=return or price) and the stock.

vi) Create a data set from \texttt{stockprices} that contains the first or the last observation of each year. \textbf{Hint:} \texttt{dat\_year=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}. \textbf{Hint} \texttt{PROC EXPORT}: Use SAS help. See \texttt{PROC EXPORT} Statement. Define in the procedure \texttt{DATA}, \texttt{OUTFILE} and the options \texttt{REPLACE} and \texttt{DBMS}. 