

Data Preparation for 4th set of SAS assignments

1. Event Studies in SAS

This assignment is based on chapter 5 in Boehmer/Broussard/Kallunki (2002). Please read through pages 43-46 and 55-57 until next week. The following Tasks prepare the data for the next assignment sheet.

- i) Read in the data `edata.dat` and label the variables as in the 1st SAS assignment. Add the following lines to the data step, which eliminate buggy data and firms which are not suited for an event study.

```
IF firm in ('74586710','77938210','03741110','03522910','67459910')
THEN DELETE;
IF firm in ('42786610','03251110','92916010','19121610')
or (firm = '90783410' and evntdate = mdy(7,15,97)) THEN DELETE;
```

Create a dummy variable named *before* taking the value 1 for all days before the corresponding event (i.e. for `date < evntdate`).

- ii) Sort the data by firm, event date and date. Use `Proc Means` to compute the number of days before the event date for each firm and each event (name the variable `bef_sum`). Merge this variable back to the original data (use a data step) and drop the variable *before*.
- iii) Compute a (negative!) counter (name it `relday`) returning the day relative to the event date (event date should be zero). Use a data step and an if statement:

```
by firm evntdate;
if first.evntdate then relday=-bef_sum-1;
relday+1;
```

- iv) Split the data set into estimation (returns on 110 trading days before the event) and

event periods (returns on the day before the event day and the event day (day 0) .
Again use a data step and an if statement.