Group Project:
Demand Estimation and Industry Pattern Analysis

To be handed in as a printout (between 5 and 15 pages (including graphs and tables)) before the last lecture. Please send me your code per email. You should also prepare a 6 minute presentation to explain to your colleagues (and to me) what you did. These presentations will take place during the last lecture.

In the box-folder you find the file cereals.csv. It contains a mixture of scanner level data from 30 different ready-to-eat cereal products as well as some cost data and store-level demographics. In the codebook.txt file there are furthermore some small descriptions of the different variables, and some first summary statistics.

Later on in your professional life it can often be the case that you are asked to work on some data that so far no one has understood well, or that people give you some broad instructions which you have to translate into something meaningful. Therefore, the following instructions will be relatively sparse. Do whatever you think is interesting; play around with the data, and come up with some hypotheses that you think make sense and are worth testing. Then write everything up in a short document, and prepare a 6 minute presentation which we can discuss in the last lecture.

Tasks

1. Explore the data and summarize it using graphs, descriptive statistics, and potentially reduced-form regressions.
2. Characterize demand: Using descriptive statistics, potential reduced-form regressions, and at least one demand model of your choice try to explain consumer demand patterns. In case you account for endogeneity problems of any kind, explain why you do what you do.
3. Develop hypotheses that you think are interesting and test them using the data (or parts of the data) in the dataset. In case you would like to have more information regarding the industry, you can look at the first paper on my googlesite. In it there are further references of several other papers which explore parts of the industry in detail. However, I am not aware of any paper that looks at a horizon as long as you have in the dataset.