## Transform data into real data&per capita data

## April 26, 2013

The score of this homework is 30 which is triple that of Problem Set 1. Please sent your solution to TA's email  $(xu\_longyi@163.com)$  in attachment before 12:00 pm 12th May .

You need to submit the following data with corresponding descriptions and programming codes. The description should be clear enough to show how you process the data. Any technique (software or programming languages) that helps solve the problem is accepted.

- 1. Real market return.
- 2. Real cap1-cap10 return.
- 3. Real  $R_f$ .
- 4. Real capitalization for cap1-cap10 per capita.
- 5. Real Consumption per capita.

Hints: You can find all the financial data on CRSP and the macro-economic data on http://research.stlouisfed.org/. But the raw data looks complicated. You should select data accordingly and give your reasons. All nominal data should be defalted using the chained price index. Demographical information is requested to compute per capita variables.