Problem 1) Use freely available data from the web to predict/explain macroeconomic indicators. Financial/Economic/Fundamentals data are not allowed.

Solution:

After trying many other datasets, I chose to use The University of Michigan Investor Sentiment data. I use this data to predict the real gdp. The data is quarterly and our data set is from Q3 1987 to Q2 2017. After some basic cleaning and aggregation, a basic linear regression model has a reasonable predictive power with an r-squared of 25%.  
  
The above model is very simple and can be improved by using a more non-linear fit compared to the simple linear regression. Also, other survey numbers from similar datasets might be combined with this to get a better score.