## **Relationship Between Economic Recessions and Educational Activity**

## Topic:

Our group is interested in investigating the relation between economic recessions and educational activity. Using historical data from 4 major stock indices, bond yields, and Consumer Price Index data, we will characterize economic recessions with an emphasis on the 2001 and 2008-2009 recessions. We will then seek to determine the impact of these recessions on educational activity. In this context, we will be looking at school enrollment across all ages and all levels of education.

## **Questions:**

Our major question is what economic factors are correlated with a decrease in educational activity?

Our major question can be answered by answering sub-questions that look at specific economic and educational activity factors. What factors influence enrollment rates, graduation rates, and post-graduate employment? Are students opting to lessen their commitment to school or drop it altogether during economic downturns? Which types of higher-education institutions are most affected by recessions?

## Data:

The nonfarm employment data give insights into the labor force. It includes 300 numeric records on monthly unemployment rate, work hours and earnings from 1992 to 2017. It's accessible as csv files on Bureau of Labor Statistics website.

Data for the DJIA, S&P 500, NASDAQ, Russell 2000, and Bond Yields are available from Yahoo! Finance in the form of csv files. These datasets give weekly highs and lows, opening and closing prices, as well as volume for the stock indices. Each of these datasets contains 1365 records and average 100 KB in size.

The National Center for Education Statistics provides data that describes number of enrollments, number of graduations, education outcomes, admissions, and student financial aid. The data is available through The Intergrated Postsecondary Education Data System (IPEDS), on an institution-by-institution basis from 1990 to 2017 in csv format. URL of IPEDS: https://nces.ed.gov/ipeds/Home/UseTheData

The Bureau of Labor Statistics provides data on Consumer Price Index and wages from the 1960-2018 in the form of txt files. Although not in a csv format, the data is structured and we will be able to reformat the data as needed. URL of data portal: https://www.bls.gov/cpi/data.htm