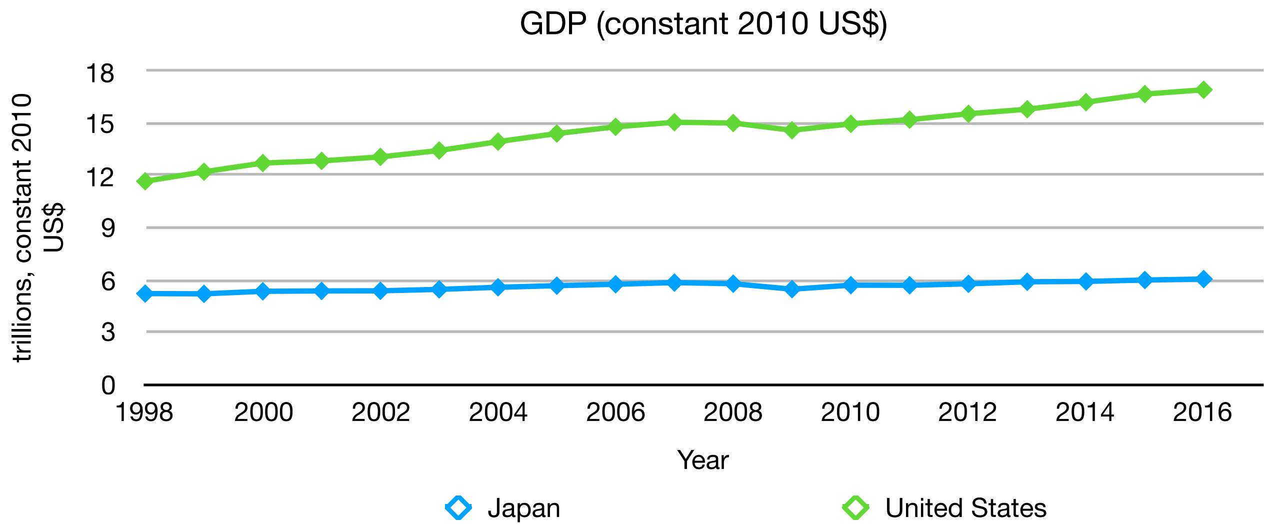
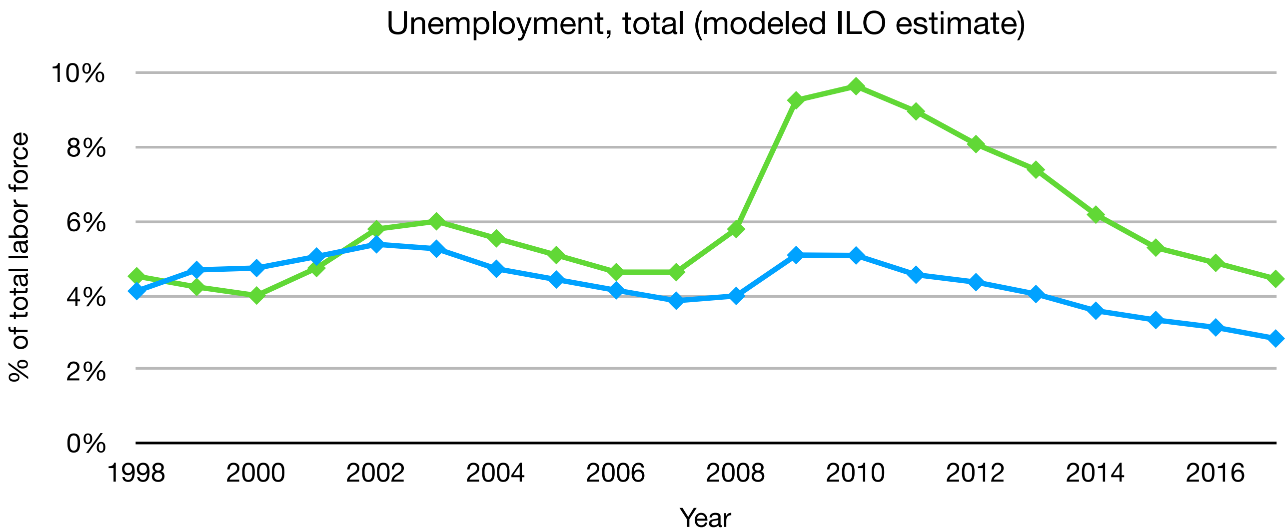
Investigation of various macroeconomic variables in Japan and the U.S.

Different economies respond differently to radical shifts in the market, and various macroeconomic variables surface this variance. This essay will investigate the changes in the **Gross Domestic Product (GDP)**—the total output of goods and services in an economy—, the **Unemployment rates**, **the Consumer Price Index (CPI)**—the overall price of goods in the economy—, and the **Total Household Consumption,** during the last 20 years in Japan and the U.S., focusing on the economic crisis of 2008, with regards to fundamental macroeconomic objectives such as stable growth, low unemployment, and a stable price level. All variables are adjusted for inflation, with 2010 as the base year. All monetary values are in USD.

In a very simplified sense, the crisis in 2008 was in large part caused by the bankruptcy of a global financial services firm Lehman Brothers Holdings. This resulted in various economic problems such as its investors around the world losing their funds, **leading to a global economic recession; a decrease in GDP,** as shown in the following graph.

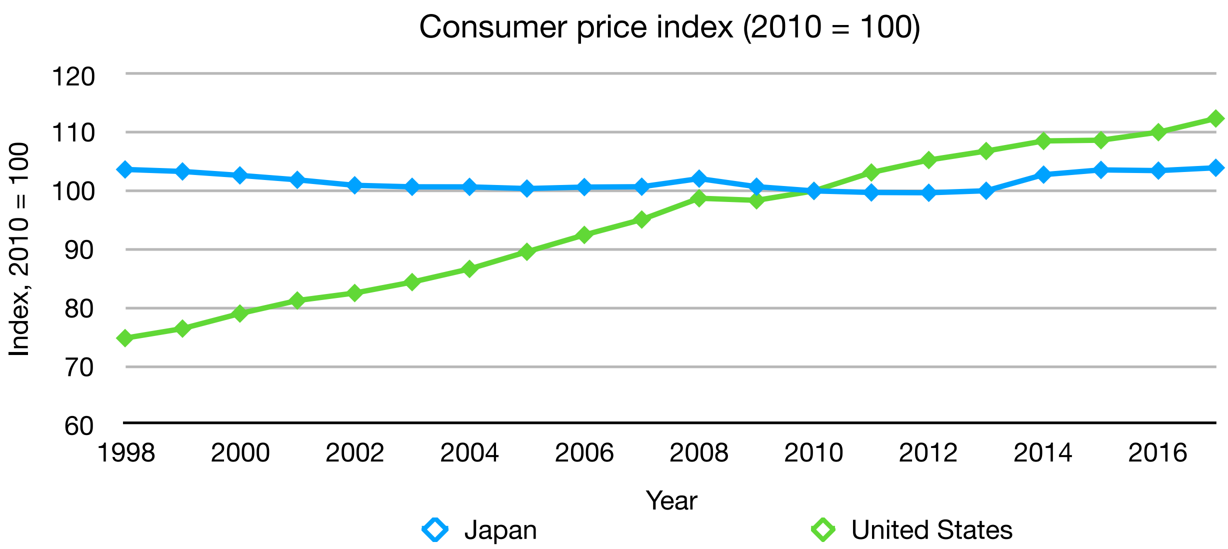


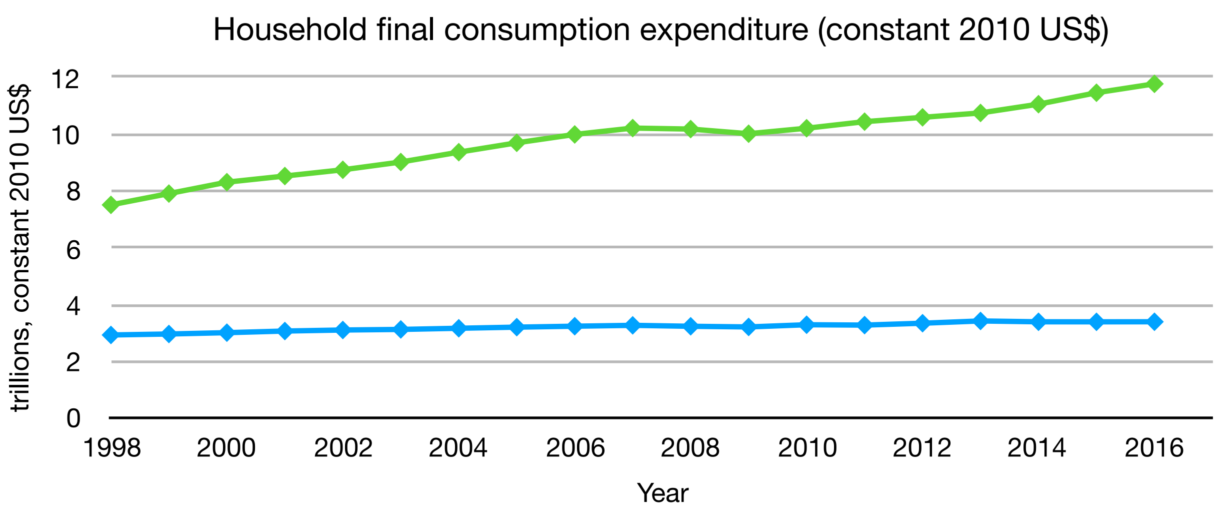


One of the most striking divergences within the two nation's economies is between the GDP and Unemployment rates. While both economies suffered a fairly significant drop in real GDP from 2007 to 2010 as seen in the graph of GDP (6.5% in Japan, 4.1% in the U.S.), the unemployment rate in Japan experienced a much smaller spike compared to the U.S.'s, (+1.22 in Japan, +5.0% in the U.S.,) and stayed within the natural range of periodic fluctuation despite, as shown in the graph of unemployment. Japan's case is surprising because a decrease in GDP is usually accompanied by an increase in unemployment, as firms produce less and hire less workers.

The stability of Japan's unemployment rates can be explained by the protective Japanese work ethic and labor laws, which offer a much higher level of job security compared to the U.S.'s. Most firms in Japan dismiss an employee through a process called Negotiated Voluntary dismissal, a procedure strictly regulated and overseen by the government.[1] Only after extreme employee misconduct does the firm forcefully dismiss an employee, and still very rarely. Layoffs—common during times of economic crises—are also a rarity in japan, and the law only permits it "in cases of truly severe financial distress where the employer can demonstrate that a reduction in workforce is necessary in order to avoid insolvency."[1] These protections explain Japan's stable unemployment rates, which allow them to limit the potential effects of the crisis. We can also consider these types of regulations **to be more equitable than those of the U.S.,** as they can protect sources of a family's income and possibly allow them to maintain their quality of life, even during harsh times.

Conclusively, we can see that although both countries keep a low level of unemployment, Japan is better at maintaining this low rate even during times of economic crises, **and therefore is better achieving the goal of sustaining low unemployment.**





Another observable correlation is between the rate of inflation/deflation, and the total household consumption expenditure. If there is **inflation**, households tend to spend more on goods as they expect the price to rise, and might save less as the value of their savings will diminish. However, during **deflation**, as during 2008, households hold on to their money, as they expect prices to decrease. Also, during times of crises, households might save more, preparing for potential risks, like loosing a job. This can be seen when comparing the graphs of CPI and Household Consumption Expenditure of the U.S.; as CPI increases (inflation), Expenditure rises, as during 1998 to 2007, and vice versa, as during 2006 to 2009. Japan, on the other hand, in an interesting case, where the graphs show a slight, but constant deflation, while total expenditure steadily increases, going against the predictions made by relevant economic theories.

Overall, we can see that the U.S. has maintained a steady, stable growth of GDP, only experiencing a slight reduction during the crisis. However, Japan has a near-zero growth rate, and often experiences a decrease in GDP. Also, compared to the steady increase in price levels (inflation) in the U.S., Japan's price levels continue to decrease, resulting in a deflation. Therefore, with regards to the goals of Stable price levels and sustained growth, we can see that partially, the U.S. is better achieving their macroeconomic objectives.

[Graph Data] databank.worldbank.org/data

[1] www.employmentlawworldview.com/three-ways-to-dismiss-employees-in-japan/