**ECN-100: Homework Week 8: Unemployment and Inflation**

1. In the U.S., the inflation rate in January 2000, the Dexter’s family applied for home mortgage to a bank and locked up a fixed interest rate of 9% for the first two years, then the “adjustable rate” for the next five years was up to 11%. Right after the contract is signed, the inflation between the years 2000 through 2007 was 4.8%.

1. Assess the Dexter’s situation. Were they better off with their mortgage deal? Think in terms of “real” terms. Calculate the change in real interest rates they are paying (when they signed, the first two years, the next five years).
2. In 2008 until 2010, the price of houses had gone down by 30% of the peak 2007 price. And inflation rate turned into deflation of 2% during those years, and the Dexter’s refinanced their mortgage rate into 6%, how would this affect the Dexter’s these two years; and what would be their “real” mortgage rate now?

2. For each situation below, state whether the unemployment is frictional, structural or cyclical.

1. Jasmine has recently moved to Florida because she loves the warm climate there. Being new to the area, she will need to spend a few weeks looking for a new job.
2. As the United States becomes a more high-tech producer, labor-intensive factories relocate to low-wage countries. Factory workers lose their jobs and the unemployment rate rises.
3. As it becomes more acceptable for mothers to work, more women enter the labor market looking for work. The unemployment rate rises.
4. Foreign economies slow and demand fewer U.S. exports. Unemployment rate rises.

3**. Sarah** works for a firm that automatically adjusts her wages to the annual rate of inflation. **Bob** works for a firm that grants its employees a 5% annual income increase. **Milt** is retired and receives two payments: a pension payment that is fixed at $2,000 per month and a Social Security payment of $1,000 per month. The Social Security payment is indexed to the inflation rate in the community.

Suppose the rate of inflation is 8% this year. Describe the effect of this inflation rate on Sarah, Bob, and Milt. Who is left in worse shape with this inflation? Does anyone end up better off despite this inflation rate?

4. Checking BLS.gov:

a) Check for the level of Unemployment rate before the housing crisis (Aug 2007) and after crisis (Dec 2009);

b) also check for the level of CPI for the above two dates; then calculate the inflation rate.

c) Check for BLS.gov/OOH for Occupations that are closest to what you are studying/aiming right now, pick TWO professions, write down the skills requirement and salary level.

d) also pick ONE more profession from OOH that are distance from your study, but you might consider that you could develop an interest given time.