Homework IV
NOT TO BE TURNED IN

1. **Money and Inflation** (4 points) In Hungary, the velocity of money is constant. Real GDP grows at 3% per year, the money supply grows at 7% per year and the real interest rate in Hungary is 2%.

   (a) What is the inflation rate in Hungary?
   (b) What is the nominal interest rate in Hungary?
   (c) Suppose that Hungary wants to bring inflation to 1% per year. What should it do to the growth rate of the money supply?
   (d) What is one benefit of a moderate rate of inflation?  
      (Hint: Focus on the real wage rate)

2. **Expectations** (3 points) We have seen that expectations play a significant role in the economy. Explain how a change in inflation expectation leads to a change in prices (i.e. if people expect higher inflation, prices increase) even if the money supply is not altered.

3. **Hyperinflation** (3 points) Suppose you are an economic adviser to a country experiencing hyperinflation (not the US). Discuss the following statements made by politicians debating the proper course for reducing inflation (stabilization).

   (a) “The crisis will not end until workers begin to pay their fair share of taxes.”  
   (b) “The central bank has demonstrated that it cannot responsibly wield its power to create money, so we have no choice but to adopt the US dollar as our currency.”  
   (c) “Let’s not blame the central bank. The problem is fiscal policy, not the monetary policy.”

4. **Tax Laws and Inflation** (1 point) Use an example of tax laws to explain how inflation could be considered a social cost. Give a specific example.

5. **Unemployment I** (2 points) Suppose that the fraction of employed workers who lose their jobs each month (the rate of job separation) is 0.01 and the fraction of the unemployed who find a job each month is 0.09 (the rate of job findings). Calculate the natural rate of unemployment.

6. **Unemployment II** (2 points) If the government wanted to reduce the natural rate of unemployment, what could it do to the rate of job separation and/or rate of job finding (increase/decrease)? State one government policy that could reduce frictional unemployment and one that could reduce structural unemployment.
Multiple Choice (4 points)

7. All of the following are costs of fully expected inflation except that expected inflation:

(a) causes lower real wages.
(b) leads to shoeleather costs.
(c) increases menu costs.
(d) leads to taxing of nominal capital gains that are not real.

8. The inconvenience associated with reducing money holdings to avoid the inflation tax is called:

(a) fixed costs.
(b) menu costs.
(c) variable yardstick costs.
(d) shoeleather costs.

9. The natural rate of unemployment in the United States since 1952 has averaged between ______ and ______ percent.

(a) 0; 1
(b) 1; 3
(c) 5; 6
(d) 10; 15

10. All of the following are possible explanations for the trends in the U.S. unemployment rate in the last half of the twentieth century except:

(a) the changing composition of the U.S. work force.
(b) sectoral shifts.
(c) a generally increasing real value of the minimum wage.
(d) the links between unemployment and productivity.