

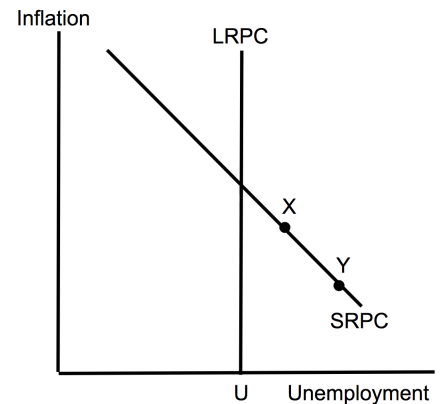


# Macroeconomics Unit 5

## Free Response Questions

**FRQ #1-** Assume that the Canadian economy is currently in a short-run equilibrium and the natural rate of unemployment is below the actual unemployment rate. See video in [Ultimate Review Packet](#) for detailed explanations.

- Draw a correctly labeled graph with both the short-run Phillips curve and long-run Phillips curve. Label the current short-run equilibrium point X. See graph.
- Assume that the United States, a major trading partner for Canada, experiences a recession. Show the short-run effect on your graph in part (a) and label the new short-run equilibrium point Y. See graph.
- Assume that the government of Canada influences government spending to achieve full employment.
  - In the short run, will the real interest rate increase, decrease, or stay the same? Explain. **The real interest rate will increase. The government will increase government spending causing a decrease in the supply of loanable funds for the private sector. This will increase real interest rates.**
  - Based on the real interest rate change in part (c)(i), what is the effect on the long-run economic growth rate? **The growth rate will decrease. Higher real interest rates means less borrowing and investment and less capital stock.**
- Now assume that the Canadian economy returns to long-run equilibrium and that the central bank increases the money supply. What will happen to each of the following in the long run?
  - The inflation rate. **The inflation rate will increase. More money leads to more inflation in the long run.**
  - The unemployment rate. Explain. **The unemployment rate will stay the same. In the long run, an increase in the money supply doesn't affect the natural rate of unemployment. The same percent of workers will be frictionally and structurally unemployed.**



**FRQ #2-** Assume that the economy of Country X has an actual inflation rate of 8%, an unemployment rate of 2%, a natural rate of unemployment of 5%. See video in [Ultimate Review Packet](#) for detailed explanations.

- Draw a correctly labeled graph of the short-run and long-run Phillips curves. Label the current short-run equilibrium as point A. Plot the numerical values above on the graph. See graph.
- Assume that the government and central bank of Country X take no policy actions.
  - Explain how the economy will adjust to full employment in the long run. **The economy has a positive output gap so, in the long run, wages and resource prices will increase. This will increase the costs to businesses and cause the short-run aggregate supply to shift left putting the economy at full employment.**
  - On your graph in part (a), show the adjustment you identified in part (b)(i) and label the long-run equilibrium as point B. See graph. **The short-run aggregate supply will shift left so the short-run Phillips curve will shift right.**
- Assume instead that the government of Country X decides to use fiscal policy to achieve full employment.
  - Would the inflation rate after using fiscal policy be greater than, less than, or equal to the inflation rate at point B. **The inflation rate from fiscal policy would result in an inflation rate that is less than the rate at point B. The government would decrease spending or increase taxes causing aggregate demand to decrease so price level would fall.**
  - Will the fiscal policy move the government of Country X toward a budget surplus or a budget deficit? **Toward a surplus. The government would decrease spending or increase taxes.**
- Assume that the government expands unemployment benefits and increases compensation for the employed. What effects will this policy have on the long-run Phillips curve? Explain. **The long-run Phillips curve will shift to the right. An increase in unemployment benefits will lead to an increase in frictional unemployment since unemployed workers will have less incentive to quickly find a new job.**

