Economics 1102-033
Homework 5
Due Date: Wed, April 16, 2008
Total Points = 100

All answers need to be typed except calculations and graphs.
Show all your work for full credit.
Graphs need to be correctly labeled for full credit.

No late Assignments are accepted

<u>Question 1: Fed's Targeting (24 points)</u>

Suppose the Fed is targeting interest rates (i.e. it wants to keep interest rates at a constant level)
Suppose interest rates are at the Fed's targeting level. Then the real GDP in the economy decreases (because of a recession).

a) On a Money demand/supply graph, show how this decrease in Y would affect interest rates. **(8 points**)

b) To keep interest rates at their target, should the Fed increase or decrease the money supply. **(8 points**)

c) Show the effect of its action on a NEW Ms/Md graph. **(8 points**)

<u>Question 2: A little bit of everything (18 points)</u>

a.) Suppose government spending increases by 40. If the MPC of the economy is equal to 0.5, by how much will real GDP (on the demand side) change (use the oversimplified multiplier)? **(6 points)**

b.) On an AS/AD graph, show how the change in G affects the price level in the economy. You need to indicate the magnitude of the shift of the relevant curve. **(6 points)**

c.) On an MS/MD (Money Supply/Demand) graph, show how the change in the price level (from b.) affects the interest rate in the economy. **(6 points)**

Question 3: Monetary Policy VS Self Correcting Mechanism (10 points)

Suppose an economy's output is currently equal to 5000.

Consider 2 scenarios:

A: The economy's central bank increases the money supply and eliminates the gap.

B: The economy's central bank does nothing (relies on self correcting mechanism).

If Potential GDP in the economy = 6000, compare the change in output and in the Price Level under Scenario A as opposed to Scenario B. (You need to state what happens to P* and Y* under each scenario. Use one AS/AD graph and show the equilibrium points under each different scenario).

Question 4: Budget Deficit/Surplus (24 points)

Suppose the following describes a government's fiscal policies:

$G = 900$

Transfers $= 10 - 0.05*Y$

Taxes $= 110 + 0.15*Y$

Suppose Potential GDP = 4000

a.) Graph the above policies as a function of GDP (just draw the govt. spending line and the taxes – transfers line) . **(6 points)**

b.) Solve for the budget deficit if Y = 3500. **(6 points)**

c.) Solve for the structural budget deficit of these policies. **(6 points)**

d.) Suppose G decreases by some fixed amount (the transfer and tax policies stay the same). After this change, the budget is balanced (i.e., deficit = 0) at Y = 3900. Under the new policies, is the structural deficit greater than, less than, or equal to 0? Briefly explain how you can tell (maybe by using a relevant graph to explain). **(6 points)**

Question 5: Federal Funds Rate Cuts (24 points)

The following exercise illustrates how the Fed's decisions affect the daily activities of an average US citizen. The article was published by the Office of the Comptroller-Department of Banking and Finance of the State of Florida. However, it applies to all US citizens, not just to Florida residents.

FEDERAL FUND CUTS AFFECT FLORIDA CONSUMERS

With the recent Federal Reserve cuts in key interest rates and Wall Street's ongoing fluctuations, financial news is regularly making front-page headlines. To help Florida consumers make sense of these economic moves—the Florida Department of Banking and Finance (DBF) offers the following information.

In an effort to prevent a slowdown of the U.S. economy and reduce the cost of borrowing, the Federal Open Market Committee has cut interest rates (11 times in 2001). This move by the FOMC—the committee that makes decisions concerning the Federal Reserve Board's operations—may affect everything from home mortgages to savings account rates. By making adjustments to the federal funds rate—the interest rate charged by one bank to another—the Fed is attempting to jump start the economy or keep it from overheating.

A cut in the federal funds rate means the nation's banks will likely cut their prime rates, which are tied to consumer lending for such items as homes and installment loans. For example, when the Fed cuts rates, banks usually follow by lowering the prime rate, the benchmark that many lenders use when making auto loans or home-equity loans to customers. Homeowners—particularly those with an adjustable rate mortgage (ARM)— are the most likely group to benefit from the Fed's move as interest rates are reduced.

On top of mortgage rates, other loan rates such as credit cards and small business could all be nudged down—which is more good news for consumers. The cut is not without drawbacks, however. Because most banks use the prime rate as the basis for the interest rates they pay on savings accounts, certificates of deposit (CDs), or money market funds, consumers may get a less interest income from those sources. Florida Comptroller Bob Milligan recommends consumers take special care to check their loan statements and review all information from their financial institutions in order to fully understand the impact of the Fed's action. Homeowners who are thinking about refinancing should be aware that the interest savings may be offset by costs to refinance.

After reading the article, answer the following questions.
NOTE THAT NO CREDIT WILL BE GIVEN FOR ANSWERS THAT ARE SIMPLY A COPY FROM THE ARTICLE. PLEASE USE YOUR OWN WORDS.
a) According to the article, state and briefly explain two ways by which consumers might be positively affected by the Fed’s rate cuts. **(12 points)**

b) State and briefly explain a drawback of a rate cut. **(12 points)**