Sample Midterm 1 (115 points)

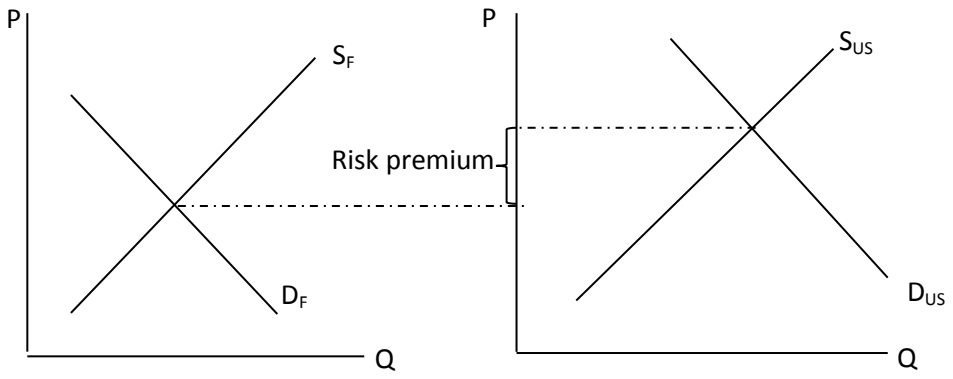
Question 1 [15 points]

a) (5 points) What is Operation Twist?

b) (10 points) Show how Operation Twist may have affected the market for long-term government bonds. Use a graph to illustrate your answer and be sure to explain why the bond supply/demand curves shift in the direction that they do. [Hint: Use the theory of portfolio choice to guide your answer]

Question 2 [15 points]

The risk premium of Ford Motor Company's corporate bonds is illustrated in the diagram below. The large risk premium reflects that Ford Motor Company's current quarter profits are less than expected. If the US Government were to announce that it would ensure that Ford would not go bankrupt, what would happen to the yields on Ford bonds? What about on US Government bonds? Will the risk premium of Ford bonds become smaller or larger? Illustrate your answer on the graph below and explain your work.



Ford Bonds US Government Bonds

Question 3 [15 points]

a) [10 points] The economy is currently experiencing high inflation and policymakers are considering lowering the rate of money supply growth. What effects will this have on the economy? Will a lower rate of money supply growth always lead to a higher interest rate? Discuss your answer.
b) [5 points] Discuss why Central banks often do not target monetary aggregates?

Question 4 [25 points]

a) [7 points] Describe what is the time inconsistency problem for monetary policy? Give a clear example.
b) [6 points] How can inflation targeting help overcome the time inconsistency problem?
c) [6 points] What does the Taylor rule prescribe for the target federal funds rate when inflation and output deviates from their target levels?
d) [6 points] Is zero unemployment desirable? Discuss why or why not.

Question 5 [10 points]

Why might it be better to target the federal funds rate rather than to target non-borrowed reserves? Use a graphical analysis to help illustrate your answer.

Question 6[20 points]

a) [7 points]Draw the market for reserves and explain why the reserve supply and demand curves take on the shapes that they do (e.g. why they are upward/downward sloping or horizontal/vertical).
b) [5 points]Suppose that the equilibrium federal funds rate is equal to the discount rate. Illustrate this equilibrium using a graph for the market of reserves.
c) [8 points]Suppose that the Fed lowers the discount rate. What will happen to the federal funds rate? Show your answer on a graph and explain your answer

Question 7 [15 points]

Assume the expectations theory of the term structure is correct.

a) [7 points] Draw the yield curves (at 1, 2, 3, 4, and 5 years) for the following series of one year interest rates: 0.04, 0.01, 0.02, 0.03, 0.04. (Note: Interest rates are expressed in decimal form ie. 15% = 0.15)
b) [8 points] Suppose that the one year interest rate in year 3 jumped by 0.02 (2 percentage points). Can you say which future expected short term interest rates have changed? Why or why not?