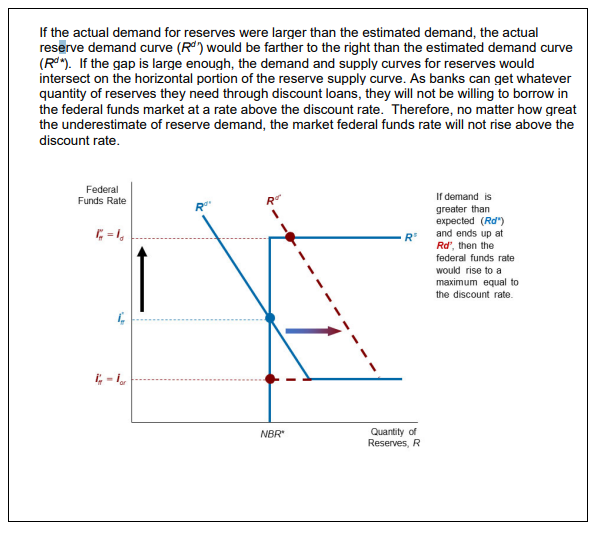
**TCHE 303 – MONEY AND BANKING**

**TUTORIAL 10**

1. If the manager of the open market desk hears that a snowstorm is about to strike New York City, making it difficult to present checks for payment there and so raising the float, what defensive open market operations will the manager undertake? ***When bad storm slows the check-clearing process, float tends to increase causing the Fed undertake the defensive open market sales***
2. During the holiday season, when the public’s holdings of currency increase, what defensive open market operations typically occur? Why? ***When the public’s holdings of currency increase, money supply falls -> the Fed will conduct a defensive open market purchase of securities, so that they can raise reserves and so as to the money supply to the target point.***
3. If the Treasury pays a large bill to defense contractors and as a result its deposits with the Fed fall, what defensive open market operations will the manager of the open market desk undertake? ***If the Treasury’s deposits at the Fed fall, the monetary base decreases as well as money supply. To counteract this problem, the manager would undertake a defensive open market purchase of securities.***
4. Suppose, one morning, the Open Market Trading Desk drastically underestimates the demand for reserves when deciding the quantity of reserves to supply to the market. Based on analysis of the market for bank reserves, explain why the market federal funds rate will not exceed the discount rate regardless of how large the gap between estimated and actual reserve demand.



1. Consider a situation where reserve requirements are binding and the central bank decides to reduce the requirements. How would the Open Market Trading Desk act to maintain the interest rate target, assuming the demand for excess reserves remains unchanged. ***If the reserve requirements fall with no change in excess reserve, the demand for reserves would fall. To maintain the interest rate target, the OMTD would practice the open market sales to reduce the supply of the reserves until the supply and demand curve intersect at the target point.***
2. In a graph of the market for bank reserves, show how the Federal Reserve limits deviations of the market federal funds rate from its interest rate target under the channel system. Next, show how the Open Market Trading Desk would implement a decision by the FOMC to raise the target federal funds rate. ***To raise the federal funds rate, the OMTD would practice the open market sales to lower the supply of reserves until the demand and supply curve intersect at the new target point. The corresponding rise in discount rate and fall in deposit rate should be practiced to maintain the spread.***  Assume that the Fed alters the discount and deposit rates to maintain fixed spreads between them and the target federal funds rate.
3. “Discount loans are no longer needed because the presence of the FDIC eliminates the possibility of bank panics.” Is this statement true, false, or uncertain? ***False. The FDIC alone cannot eliminate bank panics without the Fed’s ability to provide discount loan to troubled banks*** ***and keep them from collapse. In particular, the FDIC's insurance only covers about 1% of total bank deposits. Since the Fed has unlimited ability to provide loans to the banking system, it can be much more effective in stabilizing the banking system in a panic.***
4. What are the disadvantages of using loans to financial institutions to prevent bank panics? ***Moral hazard, “too big to fail”***
5. “Considering that raising reserve requirements to 100% makes complete control of the money supply possible, Congress should authorize the Fed to raise reserve requirements to this level.” Discuss. ***RR increases, the money available for borrowings and loans reduces and hence the MS falls, vice versa. If Congress authorizes the Fed to raise RR to this level, it will control the money supple and prevent inflation and economic recession.***
6. Compare the methods of controlling the money supply—open market operations, loans to financial institutions, and changes in reserve requirements—--on the basis of the following criteria: flexibility, reversibility, effectiveness, and speed of implementation. ***Open market operations are more flexible, reversible, and faster to implement than the other two tools. Discount policy is more flexible, reversible, and faster to implement than changing reserve requirements, but it is less effective than either of the other two tools.***
7. What are the advantages and disadvantages of quantitative easing as an alternative to conventional monetary policy when short-term interest rates are at the zero lower bound? ***Because the short-term interest rate cannot be lower below the zero bound, conventional monetary policy would be ineffective. Thus, quantitative easing is that purchases of immediate and long-term bonds can reduce the long-term interest rate, increase money supply. Otherwise, the disadvantage is that quantitative easing can result in increasing money supply, as well as inflation, thus the domestic currency devaluated.***
8. Why is the composition of the Fed’s balance sheet a potentially important aspect of monetary policy during an economic crisis? ***During an economic crisis, the Fed played purchased particular types of securities, thus, the Fed can impact interest rate and liquidity in the financial markets (add reserves to the general banking system)***
9. What is the main advantage and the main disadvantage of an unconditional policy commitment? ***Pros: transparency and certainty, Cons: not flexible,*** ***if conditions suddenly change where a change in the policy stance may be warranted, then holding to the commitment could be destabilizing.***
10. “The only way that the Fed can affect the level of borrowed reserves is by adjusting the discount rate.” Is this statement true, false, or uncertain? Explain your answer. ***False. Fed can discourage banks to borrow reserves by altering discount rates but not control the volume/level. They can do this by practicing the open market sales, reduce reserves in banking system, so as to increase borrowed reserves.***
11. “The federal funds rate can never be above the discount rate.” Is this statement true, false, or uncertain? Explain your answer. ***True. Banks are only willing to borrow form the federal fund when the rate is equal to/below the discount rate. Or else, banks will borrow from the Fed.***
12. “The federal funds rate can never be below the interest rate paid on reserves.” Is this statement true, false, or uncertain? Explain your answer. ***True. Because if the rate go below this rate, banks could earn a risk-free interest rate paid from the fed, rather than loaning excess reserve at the more risky fed fund market at an equivalent rate.***
13. Why is paying interest on reserves an important tool for the Federal Reserve in managing crises? ***During crisis, by paying interest on reserves, the Fed encourages banks to keep excess reserves with it rather than seeking risker or uncertain lending opportunities -> prevent liquidity shortage, bank failures.***
14. Why are repurchase agreements used to conduct most short-term monetary policy operations, rather than the simple, outright purchase and sale of securities? ***Because it is a short-term financial instrument, allows the fed to adjust open market operations easily.***
15. Open market operations are typically repurchase agreements. What does this tell you about the likely volume of defensive open market operations relative to the volume of dynamic open? ***Defensive > dynamic because repos are used primarily to conduct defensive OMO to counteract the temporary changes in the monetary base.***
16. From 1979 to 1982, the FOMC used money growth as an intermediate target. To do so, the committee instructed the Open Market Trading Desk to target the level of reserves in the banking system. What was the justification for doing so? Explain why the result was unstable interest rates. Would you advocate a return to reserve targeting? Why or why not? ***The reserves-targeting method tends to control the money supply, and then impact on inflation and economic activities. The FOMC attempts to keep the reserves supply constant, while the demand fluctuates due to the market conditions along with the rigid approach to the targeting reserve requirement, leading to the significant volatility in interest rates.***
17. Federal Reserve buying of mortgage-backed securities is an example of a targeted asset purchase. Explain how the Fed’s actions are intended to work. ***By purchasing MBS, the Fed try to lower mortgage rate in order to increase home sales, raise house prices and promote house construction.***
18. The strategy of inflation targeting, which seeks to keep inflation close to a numerical goal over a reasonable horizon, has been referred to as a policy of “constrained discretion.” What does this mean?
19. Go to the website of the Federal Reserve Board at [www.federalreserve.gov](http://www.federalreserve.gov) and find the section describing monetary policy tools. Which unconventional tools employed during the financial crisis of 2007–2009 has the Fed stopped using? What do you think determined the order in which various facilities were shut down? Which, if any, of the tools still remain in operation?
20. The ECB pays a market-based interest rate on required reserves and a lower rate on excess reserves. Explain why the system is structured this way. ***By this way, the ECB tends to reduce the costs to banks of holding reserves, influencing the banks’ willingness to hold reserves. Paying interest rate on excess reserves sets a floor rate under the fed fund rate, which means that banks cannot lend to each other at below the rate paid on excess reserves.***
21. Based on the liquidity premium theory of the term structure of interest rates, explain how forward guidance about monetary policy can lower long-term interest rates today. Be sure to account for both future short-term rates and for the risk premium. How does the effectiveness of forward guidance depend on its time consistency?
22. With the policy interest rate at zero, how might a central bank counter unwanted deflation? ***Apply quantitative easing to increase Money supply, reduce the borrowing cost, change the size and composition of the central bank’s balance sheet.***
23. Outline and compare the ways in which the Federal Reserve and the ECB added to or adjusted their monetary policy tools in response to the financial crisis of 2007–2009 and the subsequent financial crisis in the euro area.
24. How might the Federal Reserve exit from the unconventional policies it employed during the financial crisis of 2007–2009 without causing inflationary problems? ***They gradually sold the holdings of assets to reduce the money supply, increase interest rate, provided clear forward guidance, adjusted interest rate paid on reserves so that the reserves demand curve shifts to the right until the d and s curve intersect at the potential higher fed fund rate..***
25. The central bank of a country facing economic and financial market difficulties asks for your advice. The bank hit the zero bound with its policy interest rate, but it wasn’t enough to stabilize the economy. Drawing on the actions taken by the Federal Reserve during the financial crisis of 2007–2009, what might you advise this central bank to do? ***The central bank should establish quantitative easing to stimulates borrowing and lending by bringing down the long-term interest rates***
26. Suppose ECB officials ask your opinion about their operational framework for monetary policy. You respond by commenting on their success at keeping short term interest rates close to target but also express concern about the complexity of their process for managing the supply of reserves. What specific changes would you suggest the ECB make to its system in the future?
27. Why might inflation targeting increase support for the independence of the central bank to conduct monetary policy?
28. ‘Because the public can see whether a central bank hits its monetary targets almost immediately, whereas it takes time before the public can see whether an inflation target is achieved, monetary targeting makes central banks more accountable than inflation targeting does.’ Is this statement true, false, or uncertain? Explain your answer.
29. ‘Because inflation targeting focuses on achieving the inflation target, it will lead to excessive output fluctuations.’ Is this statement true, false, or uncertain? Explain your answer. ***Controlling inflation is come along with controls of output fluctuations, so that they can prevent a sharp rise in inflation expectations***
30. ‘A central bank with a dual mandate will achieve lower unemployment in the long run than a central bank with a hierarchical mandate in which price stability takes precedence.’ Is this statement true, false, or uncertain? ***False. There is no long-run trade-off between lower unemployment and stable inflation. So in the long run a central bank with a dual mandate that attempts to promote maximum employment by pursuing inflationary policies would have no more success at reducing unemployment than one whose primary goal is price stability.***