MAIDEN LANE DIVISION: Preliminary Round Case Study

Terms in blue are defined in the Glossary.

The Federal Reserve has a dual mandate. That is, it has two major goals that it tries to achieve. These goals are price stability and maximum employment. These goals were established by the Federal Reserve Act of 1913, which established the Fed. Therefore, the Fed cannot choose to ignore those goals, although sometimes they conflict with each other, and thus the Fed must choose which is most important at any point in time.

The following scenario describes a hypothetical situation for the United States economy. Quarterly data for five years is given after the case for each of the indicators discussed. Use this data and your knowledge of economic relationships to determine what you think that the Fed should do in this situation.

Suppose the United States economy has been improving from a recession that occurred three years ago. Economic growth has increased relative to its recession levels and has recently begun to approach and exceed usual rates of growth for the U.S. However, due to commodity price decreases, inflation has been unusually low.

Growth of income and output in the economy is measured by real Gross Domestic Product (GDP). GDP growth is usually the first indicator that economists consider in evaluating the strength of an economy. In this case, GDP growth has been weak, although it has strengthened over the last four quarters (Table 1).

One measure of the rate at which the economy is able to grow is real potential GDP, the level of GDP that is consistent with full employment of resources (also included in Table 1). If actual GDP growth exceeds potential GDP growth for long, it is likely that prices will increase as factories experience production bottleneck and workers demand higher wages.

GDP can be broken down into its parts. That is, it can be categorized by what part of the economy is purchasing goods and services. There are four categories, Consumption, Investment, Government Spending, and Net Exports. Each of those components tells a bit more of the story of what is happening with the economy (Table 2).

A major concern of the Federal Reserve is price stability, or having prices grow at a steady and acceptably low rate. In this case, some measures of price growth, or the rate of inflation, have been very low recently, in part due to low energy prices. There have been concerns of deflation. The Fed's preferred measure of inflation is the Personal Consumption Expenditures Deflation (PCE deflator). Table 3 gives data for the PCE deflator the last five years. The PCE is given both for the overall index (topline or headline PCE) and the core PCE, which does not include food and energy prices, which move considerably more from day to day.

The Fed is also concerned about conditions in the labor market. During the recession, firms laid off or fired workers, and the labor market has been slow to create new jobs, although job growth has increased lately. The natural rate of unemployment in this scenario is estimated to be 5.5%. Table 4 gives the unemployment rate for the last five years.

In bad economic times, workers may stop looking for jobs even though they are willing to work, because they are discouraged, or they may accept part time work when they would prefer full time work. Two other measures of the strength of the labor market are the U-6 rate, which includes workers who have stopped looking but would like work, and some other types of workers who are not working as much as they would like, and the labor force participation rate, the percentage of the population that is in the labor force. The growth of wages is also important, both to workers in the economy, as a measure of the strength of the labor market, and because wage growth can be related to changes in the price level. This data is also shown in Table 4.

The primary way in which the Fed influences the economy is through the relationship between the money supply, interest rates, and investment, the monetary transmission mechanism. The Fed sets a target for the federal funds rate, the rate at which banks lend to each other. The Fed influences the supply of money by buying and selling government bonds, which in turn changes interest rates. For example, if the Fed buys bonds, there will be more money in the economy, which will cause interest rates to fall (because with more money available, banks are willing to lend it more cheaply). Lower interest rates in turn increase investment and some kinds of consumption in the economy, and since spending on these things increase, GDP and employment increase. Table 5 shows the value of the effective federal funds rate for this period (the rate that actually existed in the market, which should be around the target rate).

In this scenario, the Fed has kept the federal funds rate very low to help stimulate the economy. Since the economy is apparently recovering, it may be time for the Fed to consider a rate change. But at the same time, there is low inflation and lack of confidence in the recovery, which could make the decision less clear.

Two other measures that the Fed often considers are consumer confidence and inflationary expectations (Table 6). Consumer confidence in this period has been low. In this case, consumer confidence is measured by the University of Michigan Consumer Sentiment Index. Since this is an index number, the most important thing is how it is changing, rather than the actual number. Consumers have been concerned about the strength of the economy and also about the weak labor market, because wage growth has also been limited. Consumer expectations about inflation, particularly in the longer term, are also beginning to change. The term that the Fed often uses for this is to say that inflationary expectations are not "well anchored." Both of these things may have an effect on consumer spending. In the U.S., consumer spending is very important to the economy, counting for about 2/3 of GDP in most years.

Wages also have a large effect on the overall price level. Another factor of interest in this time period is the behavior of oil prices. Due to instability in the rest of the world, oil prices have been falling sharply over the last two years. Usually the Fed is not concerned about the prices of single goods, but the price of oil affects many things in the economy. Data for oil prices is given in Table 7.

Use the information above to analyze the state of the economy, and explain the choices that the Fed faces. Consider both the key issues and the focus questions in writing your case analysis. Based on your analysis, what policies would you recommend that the Fed implement?

Key Economic Issues

- Recession and slow output growth
- The Fed's dual mandate
- Impact on consumer spending of confidence and slow wage growth.
- Impact on consumer spending of a weak labor market
- Impact on business investment of these factors
- Low inflation rates and the possibility of deflation
- Labor force participation and its effect on the labor market
- The ability of Fed policy to affect desired economic targets
- How oil prices affect the economy.

Focus Questions for Case Analysis

1. How would you describe the current state of the economy?
2. What is each component of GDP doing, and why do you think that is happening?
3. Describe the condition of the labor market.
4. Why do workers enter and exit the labor market?
5. Do you think that consumer confidence is having an effect on the economy?
6. How might low wage growth affect the economy?
7. How might falling oil prices affect the economy?
8. What difficulties does this situation present for the Fed?
9. What are all of the options that the Fed has in this situation?
10. What do you think that the Fed's best course of action is?

Challenge question: The Fed considers core measures of inflation to be the best price indicators. However, oil prices are excluded from the core, due to their volatility. Why might the Fed be concerned about the impact of oil prices? In other words, do oil prices have any effect on core inflation, and are there other channels through which they affect the economy?