

1. In the first reading material --- 0. Five Questions for Janet Yellen --- the author asked if “it is appropriate for the Fed to still be considering interest hikes when LMCI (Labor Market Conditions Index) is moving away from the goal of full employment”. According to his question, we can see there must exist a relationship between the employment rates and interest rates. Why do we need to consider unemployment or employment rate for monetary policy?

1) Purchasing power or consumption at macroeconomic level may be related to employment rate.

2) The fact that unemployment rate is decreased can imply that wages will go up soon because business would compete for labor. If wages increases, it can lead to inflation. The Phillips curve tells such a relationship between unemployment and inflation.

3) According to ‘Taylor rule’, if inflation or output (employment) increases, the Federal fund target rate should be increased. Taylor rule for monetary policy is the rule to consider “both” unemployment and inflation.

$$i = r + \pi + w_1 (\pi - \pi^*) + w_2 (Y - Y^*)$$

i : Nominal fund rate (the Federal fund target rate)

r : Real federal fund rate (effective federal fund rate)

w_1 & w_2 : weights, which are usually 0.5

$\pi - \pi^*$: inflation rate – target inflation rate

$Y - Y^*$: real output – potential output

See this article: <http://www.investopedia.com/articles/economics/10/taylor-rule.asp>

Note that whether the Fed will rate interest rates can depend on which rule to follow between discretion and concrete rules.

2. Yellen has declared to follow optimal policy. What is the optimal policy?

According to her, “This approach starts with a forecast for the economy, and then solves a large-scale macroeconomic model to find the path of the funds rate that minimizes the deviation of inflation and unemployment from their respective targets. The Federal Open Market Committee (FOMC) targets an annual inflation rate of 2% over the long run and an unemployment rate of 6% (the latter number an estimate of the economy's "natural" unemployment rate). Under the optimal control approach, the central bank would then use a model to calculate the optimal path of short-term interest rates in order to hit these targets. As long as unemployment is further away from the target level than inflation, then monetary policymakers would keep interest rates low in an attempt to correct this, even if it means inflation runs slightly above target for a while.” In other words, Yellen will have to keep interest rates very low to lift inflation according to optimal policy.

3. What do you mean by the term “labor market slack”?

It refers to the case where the number of job seeker is more than that of job offerer.

4. What is tight policy?

The Fed tries to constrict money supply by selling government bonds, raising banks’ reserve requirements, or applying strict credit qualification to curb inflation. In other words, the Fed tries to soak the money from its economy.

5. Some people insist that the Fed should not raise interest rates so soon by mentioning “since the Fed began and completed the process of ending quantitative easing (QE), the dollar has risen in value, the stock market rally has stalled, the yield curve has flattened, broader economic activity has slowed, and now we are experiencing a slowing in labor market activity.” To evaluate whether these events are signs for tighter monetary policy or not, we need to understand some concepts and mechanisms:

[Some of comments below are not my own idea but come from some website. Sorry for the loss of reference for #5]

Note that our topic is also related to the prospect of U.S. economy. If you think these events are really signaling the downturn of U.S. economy you may want not to increase interest rates. If you think these events are also showing the upbeat records, then you may want to increase interest rates. In addition, this topic can be discussed by considering whether global economy would be O.K. if the Fed increases interest rates soon.

1) What is the relationship among short-term and long-term interest rates, and expectations of future inflation?

In most of countries central banks control short-term interest rates not long-term interest rates. (Market forces---supply and demand---determine equilibrium pricing for long-term bonds, which set long-term interest rates.) If the bond market believes that the FOMC has set the fed funds rate too low, expectations of future inflation increase, which means long-term interest rates increase relative to short-term interest rates - the yield curve gets steeper. If the market believes that the FOMC has set the fed funds rate too high, the opposite happens, and long-term interest rates decrease relative to short-term interest rates, flattening the yield curve.

2) Why do expectations of future inflation increase when short-term rate is low?

Since the decrease in interest rates makes the opportunity cost of holding money smaller, people would want to hold it. Accordingly, money demands increases and people would expect future inflation to rise.

3) What are the impacts of the rise in USD's value?

- The rise in the dollar refers to dollar's appreciation (equivalently, depreciation refers to a decrease in the value of the currency). If the US dollar appreciates relative to the euro, the exchange rate decreases ($1 \text{ EUR} = 1 \text{ USD} \rightarrow 1 \text{ EUR} = 0.5 \text{ USD}$). The exchange rate is USD/EUR. If it happens, then it causes problems for exporters. Relative price of US export goods over EUR in our case becomes higher than previous price. That is, if dollar appreciates, Europeans need to pay 2 euros to buy goods whose US price is 1 dollar. Therefore, you can think of US exporters' cost, European consumers' cost, US importers' benefit, and European exporters' benefit.
- Think of Chinese Yuan. If USD appreciates, then it automatically means that Yuan depreciates if China does not increase the value of the currency. Because depreciation in Chinese currency can affect its economy, having huge impacts on global economy, if you think global economy still in danger of recession, you may not want Yuan to depreciate.
- However, for developing countries who suffers inflation USD appreciation may be helpful to control its inflation.

4) What do higher interest rates play a role in the global financial market?

“Higher interest rates would attract some ‘hot money flows’. Hot money flows occurs when banks and financial institutions move money to other countries to take advantage of a better rate of return on saving. Given interest rates are close to zero in the US, higher interest rates in developing countries give a significant incentive to move money and savings there. However, higher interest rates may reduce the rate of economic growth. In many circumstances, e.g. in recession, higher interest rates would not be suitable. (though higher interest rates will also reduce inflationary pressures)”

5) US inflation is below the 2% target. What does the low inflation rate mean?

If inflation is relatively lower than competitors, then the countries goods will become more attractive and demand will rise. Lower inflation tends to increase the value of the currency in the long term. To reduce inflation, the central bank can pursue tighter fiscal and monetary policy and also supply side policies.

6. I think this website [explains the flatten yield curve](#) very clearly. I just copied and pasted it.

(If you want to read more, see <http://bonds.about.com/od/advancedbonds/a/yieldcurve.htm>)

1) The Yield Curve: A Review

The “yield curve” is simply the yield of each bond along the maturity spectrum plotted on a graph, as shown here. The yield curve typically slopes upward, since investors need to be compensated with higher yields for assuming the added risk of investing in longer-term bonds.(Keep in mind, Rising bond yields reflect falling prices, and vice versa). The direction of the yield curve is typically measured by comparing the yields on the two- and 10-year issues, although the difference the federal funds rate and the 10-year note can also be used.

2) What is a Flattening Yield Curve?

The term “flattening yield curve” sounds very technical, but in fact the concept is very straightforward. When the yield curve flattens, it means that the gap between the yields on short-term bonds and long-term bonds decreases, making the curve appear less steep. The narrowing of the gap indicates that yields on long-term U.S. Treasury bonds are falling faster than yields on short-term Treasury bonds or, occasionally, that short-term bond yields are rising even as longer-term yields are falling.

3) Why Does a Yield Curve Flatten?

A flattening yield curve can indicate that expectations for future inflation are falling. (Since inflation reduces the future value of an investment, investors demand higher long-term rates to make up for the lost value. When inflation is less of a concern, this premium shrinks.) A flattening also can occur in anticipation of slower economic growth. And sometimes, the curve flattens when short-term rates rise on the expectation that the Federal Reserve will raise interest rates.

7. In the bond world, a smaller yield premium is known as a flattening yield curve. In the past, bond investors and analysts typically interpreted it as a warning sign that growth momentum may be slowing because of a tightening in monetary policy. However, some people---who think there have been few signs that the U.S. economy is heading into a downturn--can say ‘the flattening trend of the yield curve over the past two years has been driven by global thirst for income in a low-yield world, with strong foreign demand compressing yields in long-term Treasury bonds.’”

<http://www.wsj.com/articles/government-bond-yields-rise-on-upbeat-u-s-data-1463493631>