

Week 4, Part 5: Monetary Policy in Sovereign Nations

Now let's talk about monetary policy. Here's the takeaway: monetary policy is oversold.

We'll get to why later.

In mainstream economics, the rule of thumb for distinguishing monetary policy from fiscal policy is: Monetary policy is what the Federal Reserve does. Fiscal policy is what Congress and the executive branch do.

Congress approves spending and writes tax laws. The executive branch of the government spends money per congressional appropriations and collects the taxes. Within the executive branch the Treasury Department has the job of overseeing money flows in and out of the government.

The Federal Reserve is not concerned with taxation and, except for some coordination issues, not concerned with government spending either. The Fed is one of a number of agencies charged with regulation of the financial system. The Federal Deposit Insurance Corporation (FDIC) and the Office of the Comptroller of the Currency (OCC) are other such agencies. The Federal Reserve has prime responsibility for maintenance of the payments system and for providing liquidity to the banking system. The Federal Reserve is charged with being the lender of last resort to the banking system in the event of a crisis.

All of these responsibilities are important, but they don't fall into what we usually describe as monetary policy per se. They're not aimed directly at affecting macroeconomic variables such as the level of output, income, employment, prices or interest rates. However, since _____ the Fed has been required by Congress to pursue the so-called "dual mandate" of stable prices and employment. Keep inflation low; keep employment high. Twice a year the chair of the Federal Reserve has to testify before each house of Congress to report on its success in pursuing the dual mandate.

So the questions we have to ask are:

- * What are the tools of monetary policy which the Fed uses to pursue the dual mandate?
- * How well do those tools work?

The principal tools available to the Fed to affect the overall economy are changes in interest rates. Interest rates affect decisions made by individuals and businesses to borrow. Individuals borrow for housing purchases; purchases of durable goods such as autos; student loans; and consumption on credit cards. Businesses borrow for long-term investment in plant and equipment, financing raw materials purchases and inventories, and covering short-term cash-flow needs. If interest rates go up, all of those activities are likely to fall. Those declines will show up in the 'C' (consumption) and 'I' (investment) components of GDP. If interest rates go down, all of those activities are likely to increase, leading to increases in 'C' and 'I' and therefore in GDP.

The interest rates which lenders charge for these forms of credit are usually expressed as markups on the rate at which banks lend to each other overnight. Banks have to meet reserve requirements imposed by the Fed and if, at the end of the business day, they are short reserves, the quickest way for them to obtain reserves is to borrow them overnight from banks with surplus reserves. In the U.S., this overnight interbank interest rate is called the "federal funds rate (or the "fed funds rate" for short).

The fed funds rate is the Federal Reserve's most important policy target. The Fed tries to keep the fed funds rate within a certain narrow range, currently 2% to 2.25% per year. When the Fed lowered its fed funds target rate by a quarter of one percent this summer, it did so in the hope that borrowing would become more attractive to individuals and firms, thereby staving off anticipated declines in GDP.

How does the Fed affect the fed funds rate? We'll get to that in a minute.

Before that we have to take note of two other interest rates that the Fed directly controls. Each bank that is part of the Federal Reserve system has an account at the Fed — its reserve account. The main purpose of a bank's reserve accounts is to settle payments with other banks, i.e., to clear checks. Does the Fed pay banks interest on the funds in their reserve accounts? Currently, the answer is yes: a low, nominal rate of __%. But that's a relatively recent development. For decades, up until ____ the rate of interest which the Fed paid to banks on their reserve accounts was 0%.

The other interest rate which the Fed directly controls is the discount rate. We said that banks typically meet shortfalls in their reserve requirements by borrowing from one another overnight at the federal funds rate. That lending presumes that the lending bank has confidence in the borrowing bank's ability to re-pay the loan. What if the borrowing bank can't win the confidence of a lending bank? At that point, it has to suffer the embarrassment of borrowing directly from the Fed itself. This is often called "borrowing at the discount window" and the rate the Fed charges is known as the "discount rate".

So we have three relevant interest rates:

- * Lowest is the rate which the central bank pays on reserves deposited with it by member banks. Let's call this the **floor rate**. Policy could set this as low as 0%.
- * In between is the **overnight interbank rate**, which the central bank tries to keep within a certain range.
- * Highest is the **discount rate**, which is in effect a penalty rate.

Open Market Operations

How does the central bank act so as to keep the overnight interbank rate within the targeted range? By what are called open market operations. Let's say a bank finds itself with excess reserves at

the end of the day. Those reserves are only earning interest, if at all, at the floor rate. So the bank has an incentive to get a better rate of return on those reserves and it can get that by lending to another bank at the interbank rate. But what if the banking system as a whole is awash with excess reserves.

Individual banks will compete to lend in the interbank market by lowering the interest rate they'll charge a borrowing bank. That tends to drive down the interbank rate toward the floor rate (or zero). More specifically, it tends to drive down the interbank rate past the lower edge of the central bank's targeted range.

At this point the central bank has to take action to keep the interbank rate from sinking below the targeted range. It conducts what are called "open market operations." At any given moment the Fed has a large quantity of Treasury bonds in its portfolio. The banks likewise have a large quantity of Treasury bonds in their portfolios. Generally speaking, these bonds, being long-term financial instruments, will pay a rate of interest higher than the overnight interbank rate. The central bank will offer to sell Treasuries to member banks. If the member banks accept, they will pay for these Treasuries with their excess reserves. The fact that excess reserves will go for Treasuries rather than overnight lending will alleviate downward pressure on the interbank rate and keep it within the range desired by the central bank.

If the banking system as a whole is short on reserves, there will be upward pressure on the overnight interbank rate. The central bank offers to buy Treasuries from individual banks and credits the reserve accounts of those banks at the Fed.

In either case, the effect of open market operations is to change the composition of banks' asset portfolios. Sometimes more cash (in the form of reserves); sometimes more longer-term assets (Treasury notes and bonds). Open market operations do not change the level of net financial assets held by the banking system as a whole.

You can see that this all gets quite complicated — but we have to toss in a few other observations.

First, we spoke of reserve requirements: the percentage of deposits which an individual bank must keep by law or central bank policy in its reserve account at the central bank. We should note that while the U.S. imposes reserve requirements on banks, other countries (*e.g.*, Canada) do not. This does not mean that the banks in other countries are less safe than U.S. banks. It just means that their safety is enforced in other ways. It also does not mean that banks in other countries are free to make more loans than U.S. banks. MMT stresses that banks lend when they spot profitable lending opportunities and then satisfy any reserve requirements after the fact.

Second, while the central bank focuses mainly on the overnight interbank rate, it can also influence longer-term rates as well. Suppose the Fed sells a large quantity of 10-year Treasury bonds from its portfolio. This puts downward pressure on the market price of these 10-year Treasuries. Since the price of bonds and their effective interest rates vary inversely with one another, the effective interest rate on these Treasuries will rise.

Third, while in normal times central bank open market operations are implemented through purchase and sale of Treasury bonds — very safe, highly tradeable assets — in times of crisis, the central bank, as part of its lender-of-last-resort function may purchase other less safe, more illiquid assets from banks and in turn provide banks with an injection of reserves. We saw the Fed bail out the very largest banks during the Great Financial Crisis by purchasing bad debt from the banks in the Troubled Asset Relief Program (TARP) and the so-called quantitative easing (QE). But note that in these crises keeping interest rates within a certain band becomes a much less important target for central bank policy than salvaging the overall financial system.

Fourth, we spoke of Treasury bonds as being major components of the balance sheets of both individual banks and the central bank — but we glided past the question of how those Treasuries got there in the first place. Conventional economic theory says that the Treasury sells bonds to "pay for" spending when tax revenues are insufficient. Treasury bonds are therefore seen as plugging the hole created by deficit spending. Conventional economic theory therefore characterizes sale of federal debt instruments as fiscal policy — what the Treasury does — and not part of monetary policy — what the Federal Reserve does.

Modern monetary theory takes a different view. MMT says that the federal government, in its sovereign capacity as the currency issuer, creates money by spending it into the economy, then pulls that money back out of the economy via taxation. People wouldn't have the currency with which to pay their taxes if the government hadn't spent that into the economy first. Similarly, when the Treasury sells bonds, the purchasers must have somehow acquired the currency with which to make those purchases. That can only have happened if the government has spent that currency into the economy first. Treasury bond sales therefore don't "pay for" government spending any more than taxation does.

What then is the function of Treasury bonds? They offer an alternative to cash in the portfolios of the non-government sector of the economy. They provide a very safe financial asset that serves as the foundation of the financial system — the benchmark against which all other financial assets are valued.

You could say that MMT views Treasury bond sales more as a part of monetary policy than of fiscal policy. But it would be better to say that MMT believes that the conventional view — a sharp distinction between fiscal policy and monetary policy — is misleading. In point of fact, the Treasury and the Federal Reserve cooperate quite closely on a daily basis, so what are conventionally called fiscal policy and monetary policy actually blur into one another.

So, if the main tool of monetary policy is central bank moderation of interest rates, how effective is that tool?

Well, we know from the experience of 1979-1982 that:

- * If the government believes that inflation is "out of control";
- * If the government believes that "excessive" wage increases are the main driver of that inflation;
- * If the government believes that "excessive" wage increases reflect "excessive" bargaining power on the part of labor;
- * If the government believes that labor's bargaining power can be "tamed" by throwing lots of people out of work;
- * If the level of employment is a function of aggregate demand;
- * If aggregate demand is significantly affected by individuals' and businesses' ability to borrow;
- * If jacking up interest rates to very high levels will diminish the demand for credit;
- * Then, jacking up interest rates will choke off credit, leading to a fall in aggregate demand, a fall in employment, a fall in labor's ability to bargain for higher wages, a fall in money wages (and perhaps in real wages as well), and an eventual relief from the part of inflation attributable to wage increases.

So, yes, at the extreme, changes in interest rates can have a tremendous impact on the overall level of output, income and employment.

On the other hand, we can also have a situation where interest rates have fallen to very low levels, even zero, even negative rates when price movements are taken into account — and yet where businesses don't want to borrow, no matter how cheap the money, because they don't expect to make profits off the investments they would fund with that borrowing. So you can have a situation where there's all kinds of money available for borrowing, but nobody wants to borrow even if it's effectively free.

In the General Theory, Keynes described this situation as a "liquidity trap". This is what we had in the depths of the Great Depression and, I would argue, what we had at the deepest points of the Great Financial Crisis.

So, no, at the other extreme, changes in interest rates might not have any favorable impact on the overall level of output, income and employment.