Expansionary Monetary Policy in a Recessionary Gap

If the Fed engages in expansionary monetary policy to combat a recessionary gap, the increase in the money supply will lower the interest rate. The lower interest rate reduces the cost of borrowing and the return to saving. Therefore, firms invest in new plant and equipment, while households increase their investment in housing at the lower interest rate. In short, when the Fed increases the money supply, interest rates fall and the quantity demanded of goods and services increases at each and every price level. The aggregate demand curve shifts from $AD_1$ to $AD_2$, as seen in Exhibit 1. The result is greater RGDP growth at a higher price level at $E_2$. In this case, the Fed has eliminated the recession, and RGDP is equal to the potential level of output at $RGDP_{pt}$. During the recession of 2001, the Fed aggressively lowered the federal funds rate to stimulate aggregate demand when it was faced with a recessionary gap.

For example, in the first half of 2001, the Fed slashed interest rates to their lowest levels since August 1994. Between January 2001 and August 2001, the Fed cut the federal funds rate target by 3 percentage points, clearly demonstrating that it was concerned that the economy was dangerously close to falling into a recession. Then came the events of September 11 and the corporate scandals. By the end of the year, the federal funds rate, which began at 6.5 percent, was at 1.75 percent, the lowest rate since 1961. With the slow recovery, the Fed pushed the rate down further, to 1.25 percent in November 2002. The Fed’s actions were aimed at increasing consumer confidence, restoring stock market wealth, and stimulating investment. That is, the Fed’s move was designed to increase aggregate demand in an effort to increase output and employment to long-run equilibrium at $E_2$.

Contractionary Monetary Policy in an Inflationary Gap

The Fed may engage in contractionary monetary policy if the economy faces an inflationary gap. Suppose the economy is at initial short-run equilibrium, $E_1$, in Exhibit 2. In order to combat inflation, suppose the Fed engages in an open market sale of bonds. This would lead to a decrease in the money supply, causing the interest rate to rise. The higher interest rate means that borrowing is more expensive and the return to saving is higher. Consequently, firms find it more costly to invest in plant and equipment and households find it more costly to finance new homes. In short, when the Fed decreases the money supply, interest rates rise and the quantity demanded of goods and services decreases at each and every price level. The aggregate demand curve shifts from $AD_1$ to $AD_2$, as seen in Exhibit 2. The result is lesser RGDP growth at a lower price level.
supply it raises the interest rate and decreases the quantity of goods and services demanded at every price level. That is, the aggregate demand curve shifts leftward from $AD_1$ to $AD_2$ in Exhibit 2. The result is a lower RGDP and a lower price level, at $E_2$. The economy is now at $RGDP_{nr}$ where RGDP equals the potential level of output.

Monetary Policy in the Open Economy

For simplicity, we have assumed that the global economy does not affect domestic monetary policy. This assumption is incorrect. Suppose the Fed decides to pursue an expansionary policy by buying bonds on the open market. As we have seen, when the Fed buys bonds on the open market, the immediate effect is that the money supply increases and interest rates fall. With lower domestic interest rates, some domestic investors will invest funds in foreign markets, exchanging dollars for foreign currency, which leads to a depreciation...