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Operation Twist

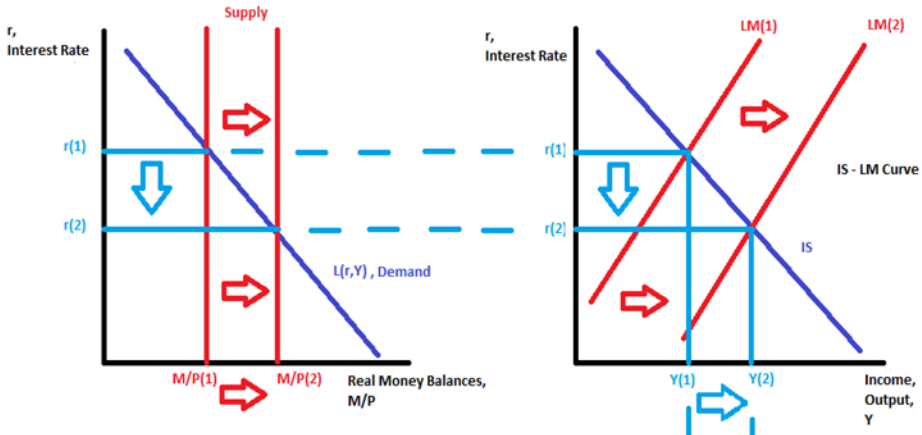
Operation Twist is the name given to the Fed's open market bond purchasing plan because it is relinquishing its short term bond holdings in exchange for those in the long term. This exchange is intended to raise the prices of long term bonds due to an increased demand to supply ratio. The higher price decreases the yield of these long term bonds while the yield of the short term bonds are increasing, which "twists" the yield curve. Since the yield of long term bonds are used to determine the interest rates for such instruments as mortgages, car and bank loans, etc., it is intended to facilitate increased investment and consumption to strengthen the economy with new activity and capital.

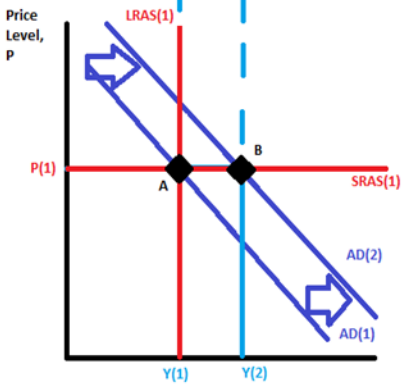
In order to purchase the substantial supply of bonds necessary to impact interest rate, the Fed introduces huge sums of money into the economy for what is referred to as an expansionary monetary policy. The results this has on the money market can be mapped by deriving the LM curve (the relationship between interest rates and income in the money market) from the supply and demand of real money balances. On the accompanying graphs, you can see that as the money supply increases, M/P shifts to the right and the new intersection between it and the Liquidity demand curve (L(r,Y)) yields a new, lower, equilibrium interest rate. As this new interest rate is applied to the IS-LM curve, you can see that it intersects with the existing IS curve (the relationship between interest rates and income in the goods and services market) at a lower point, which denotes a rightward shift from LM(1) to LM(2) to reach market equilibrium and yield an increase of output to Y(2). As this increase in output is applied to the Aggregate Demand and Supply curve, it is important to realize that the Supply Curve is horizontal in the short term because it isn't feasible for most firms to quickly alter wages and prices. In the short-run, the relative change in the Aggregate Demand ($\Delta AD/AD$) is equal to the relative change in output

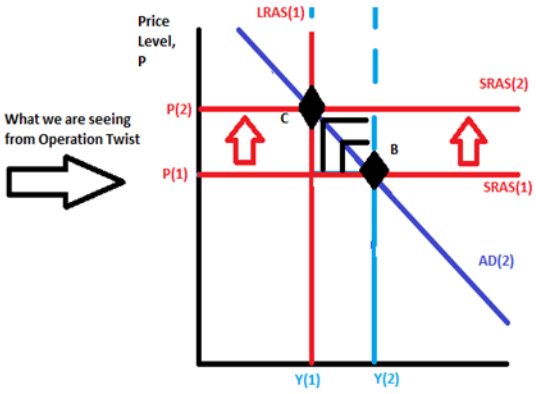
(ΔY/Y) as equilibrium shifts from point A to point B. However, firms begin to respond as time passes which means the price level will increase to P(2) so the equilibrium moves to point C, which is the initial output level but with higher prices (inflation).

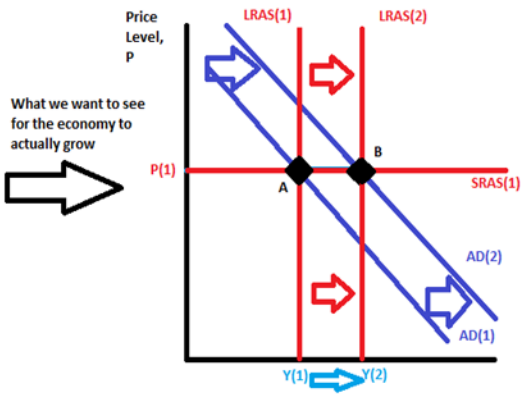
Continued analysis of the IS-LM shows that policy makers cannot repair the economy alone. Monetary policy, like Twist, increases the money supply, causing the LM curve to shift right, resulting in higher output and lower interest rates. Fiscal stimulus (increases in government spending and tax decreases) shifts the IS curve to the right, increasing interest rates and output. Higher interest rates impede C, I, and NX, and move the IS curve left which reduced output. Therefore, policy makers can raise the price level but they cannot get the equilibrium output to remain permanently above the natural level of output because whenever equilibrium output exceeds the natural level, prices rise to shift the LM curve to the left by reducing real money balances (higher price level with a constant money supply).

It was recently announced by Chairman Bernanke that the Fed will be continuing the policy. It is widely believed that this will have a limited effect, especially since interest rates were already at record lows. Due to continued uncertainty, savings will remain high at the expense of consumption and firms will respond by keeping capital and labor at low levels. Unless households and firms truly believe the economy is making improvements, they will continue to refrain from promoting the factors of production, Capital and Labor, by limiting their consumption and investment. Only then, can there be an expansion in the Long Run Aggregate Supply that will increase along with that of the Aggregate Demand from Operation Twist to push higher long term output levels and grow beyond present levels (equilibrium stays at point B).


r,
Interest Rate
Supply
r(1)
r(2)
L(r,Y) , Demand
M/P(1)
M/P(2)
Real Money Balances,
M/P
r,
Interest Rate
LM(1)
LM(2)
IS - LM Curve
r(1)
r(2)
IS
Y(1)
Y(2)
Income,
Output,
Y


Price
Level,
P
LRAS(1)
P(1)
A
B
SRAS(1)
AD(2)
AD(1)
Y(1)
Y(2)


What we are seeing
from Operation Twist
Price
Level,
P
LRAS(1)
SRAS(2)
P(2)
C
B
P(1)
SRAS(1)
AD(2)
Y(1)
Y(2)


What we want to see
for the economy to
actually grow
Price
Level,
P
LRAS(1)
LRAS(2)
P(1)
A
B
SRAS(1)
AD(2)
AD(1)
Y(1)
Y(2)