M32 addresses the **long run implications of a change in the money supply**.

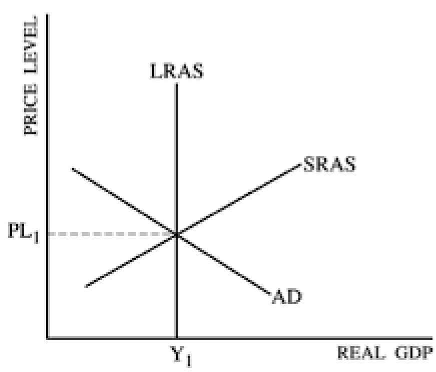
Things we know!

1. Monetary policy is about influencing the money supply and interest rates in the short run to fight a recession or push down inflation.
2. In the long run, we always return to Yp (potential or Long Run output) once wages and commodity prices become fully flexible.

Things we just read about and can now put together with what we know!

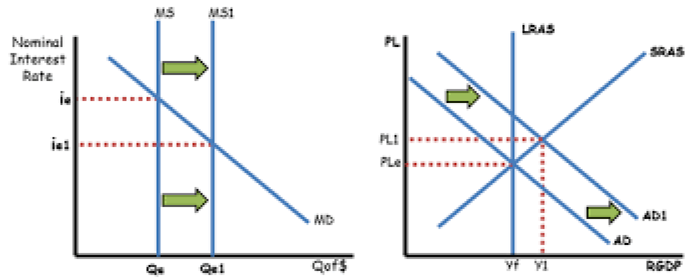
1. In the long run, monetary policy has **NO** effect on output and **NO** effect on interest rates. The only thing that monetary policy affects in the long run is the **price level.**

Example:

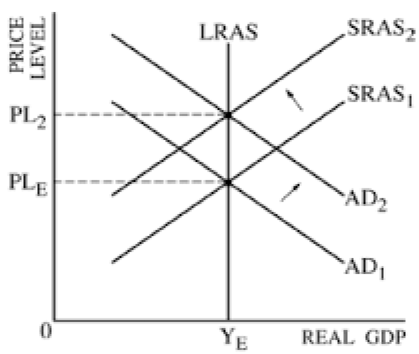


1. Let's say the Fed wants to engage in an expansionary monetary policy.
   a. The Federal Funds Rate will decrease, and to accomplish this, the Money Supply increases, IR decrease and the AD curve shifts to the right.

   b. In the short run, output increase, IR decrease, and PL increase



c. In the long run **output** eventually returns to potential output when nominal wages eventually rise and the short run AS curve shifts to the left back to Yp, thus, there is **NO change in output in the long run as a result of monetary policy**



d. In the long run the **Price Level <u>does</u>** increase (see above) because of a change in the money supply. What we need to understand is <u>how much of a price level change accompanies a change in the money supply</u>? Fortunately for us, in the long run this is proportional. This means that if the money supply increases by 2%, the Price level, in the long run, will increase by 2%. This is because of money neutrality, in which changes in the money supply have no real effects on the economy. **Money is neutral in the long run**.

e. In the long run, **Interest Rates** do not change and actually go back to their original rate that they were at before monetary policy. This is due to the fact that as prices increase, our demand for money increases…….at a proportional level because in the long run money is neutral. For example, if the Money Supply increases by 2%, we know that in the long run, Price levels will increase by 2% and that we will increase our demand for money by 2%. **See the MS shift right by 2%, ultimately increasing the price level in the AD/SRAS/LRAS model by 2% which leads to the MD curve shifting right due to people holding more money because of the price change and note that it puts IR right back to its original rate IN THE LONG RUN.**