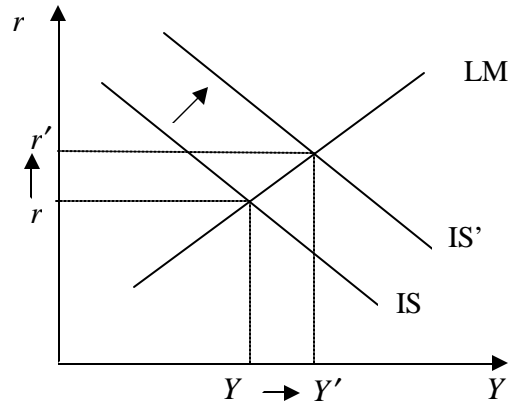


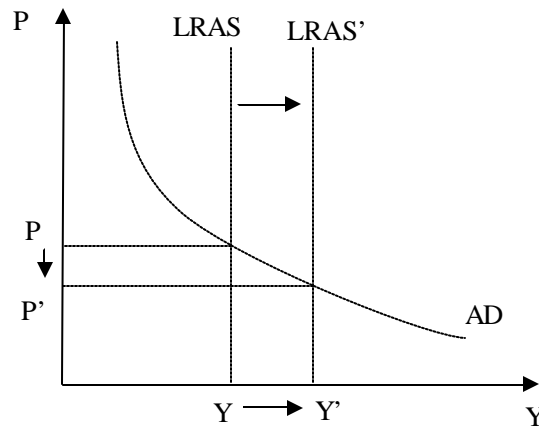
Macro Question 2

Solutions

1. In the short run, an increase in productivity raises investment demand and, therefore, shifts the IS curve outward. It raises the interest rate, r , and output, Y . The price level, P , is fixed by definition.



In the long run, an increase in A raises the full employment level of output. Thus it shifts the long-run aggregate supply curve outward. It decreases P and increases Y . Since the real money balances, \bar{M}/P , increase, the interest rate should decline.



To accommodate the effects that occur in the short run and long run, in the medium run Y must be increasing, r must be decreasing, and P must be decreasing.

2. a) The higher expected inflation, p^e , the higher the level of investment, since the real interest, $r = i - p^e$, is lower. Therefore, an increase in expected inflation shifts the IS curve outward and, consequently, the aggregate demand curve outward.
b) From Part 1 we know that an increase in A will lead to a lower price level, therefore the expected inflation is negative (we expect deflation). It will shift the IS curve and the aggregate demand curve inward. It implies that an outward shift in investment demand due to higher productivity may be offset by a rise of the real interest rate. For this reason in the short run Y will either not change or increase less than in Part 1. The behavior of the other macro variables will be roughly the same as in Part 1.
3. From the Phillips Curve equation, shocks to productivity or the IS curve will reveal themselves as changes in the price level, at least in the long run. Thus, the Fed should maintain the level of inflation as close to zero as possible. If there is a high inflation ($Y > Y^f$), the Fed should reduce the money supply to push output down toward its full-employment level. If inflation is low (or there is deflation), then $Y < Y^f$ and the Fed should increase the money supply to push output up toward its full-employment level.