

## Long Run Phillips Curve And Rational Expectation:

Friedman's adaptive expectation theory assumes that nominal wage rate lag behind changes in the price level. But according to rational expectation theory, there is no lag in the adjustment of nominal wages consequent to the rise in price level. The theory further argue that the nominal wages are quickly adjusted to any expected changes in the price level so that there does not exist the types of phillips curve which shows the trade-off between rates of inflation and unemployment. According to them, as a result of increase in aggregate demand there is no reduction in unemployment rate. The rate of inflation resulting from increase in aggregate demand is fully and correctly anticipated by workers and business firms and get quickly adjusted to the wage resulting in higher price of the product.

It is the price level rises the level of real output and employment remaining unchanged at the natural level. Hence aggregate supply curve according to the ~~real~~ rational expectation theory is a vertical straight line at the Potential GNP level ( $\bar{Y}$ ) that is, <sup>at</sup> the natural level <sup>rate</sup> of unemployment. Long run phillips curve corresponds to this long run aggregate supply curve is a vertical straight line. According to rational expectations theory workers and producers being quite rational and have a correct understanding of the economy and therefore correctly anticipated the effects ~~on~~ of government policies. It also assumes that wages and product prices are highly flexible and therefore quickly



change upward and downward.

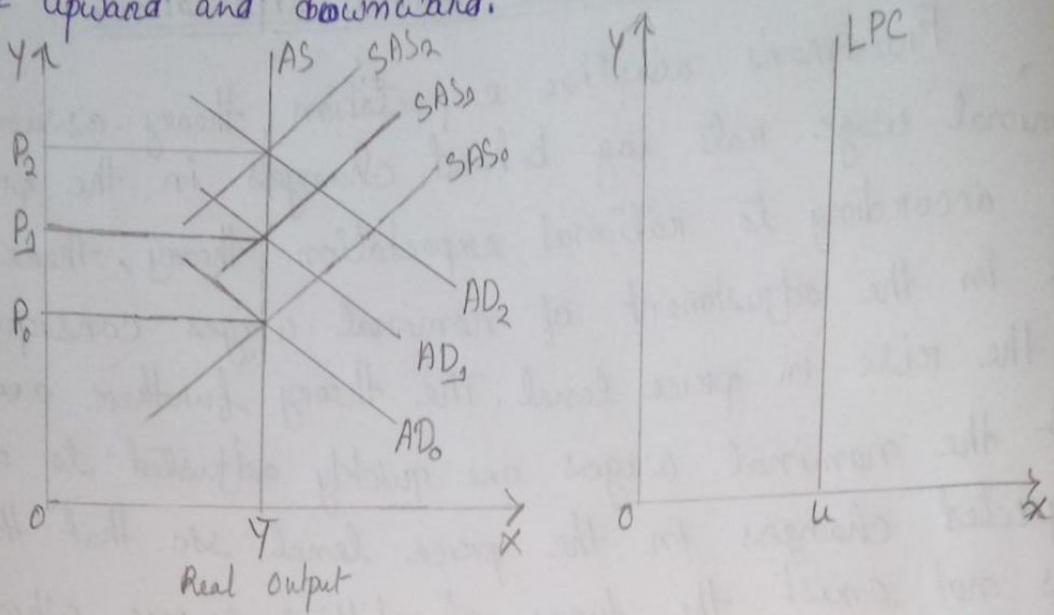


Fig: Long run phillips curve and rational expectation

Explain: Figure shows that  $\bar{Y}$  is the level of real output corresponding to the full employment of labour. LAS is aggregate supply curve at long run output.  $AD_0$  is the aggregate demand curve which intersect the aggregate supply curve LAS at point A with short run aggregate supply curve SAS and determines price level  $P_0$ . Suppose government adopt an expansionary <sup>monetary</sup> policy to increase output, as a result  $AD_0$  shifts upward to  $AD_1$ . According to rational expectation theory, people will correctly anticipate that is expansionary policy will cause inflation and would press for higher wages and get it granted. This increase would take place immediately and the equilibrium shifts to point B and price level will rise to  $P_1$ . Consequently the level of real national product and real wage rate would remain unchanged.

In rational expectation, the economy does not

temporarily from point A to E in the short run. When aggregate demand shift from  $AD_0$  to  $AD_1$ , supply curve shifts immediately from  $SAS_0$  to  $SAS_1$ , as a result of quick adjustment in wages. ~~Similarly~~ Similarly when Aggregate demand curve shift from  $AD_1$  to  $AD_2$  as a result expansionary monetary policy or fiscal policy of government, the workers will correctly anticipated the further rise in price level and will make quickly adjustment in prices. As a result  $SAS_1$  shift to  $SAS_2$  and price level rises from  $P_1$  to  $P_2$  corresponding to new equilibrium point C. The level of output  $OY$  remaining constant. So according to the rational expectations theory, aggregate supply curve is a vertical straight line which means there is no trade-off between inflation and unemployment. The long run phillips curve is also vertical at natural unemployment rate and shows relationship between inflation and unemployment when the actual inflation rate equals the expected rate.



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