

- Corresponding to equilibrium eq. employment, there is eq. output (Y_0). i.e. full employment output.
- Corresponding to the eq. output, there is an eq. price & an eq. wage rate. i.e. P_0 & $(W/P)_0$ & a corresponding eq. money wage W .
- At money wage W_0 , price is P_0 ?.. at some $M_1 V = P_0 Y$, the $M_1, M_1 V = P_0 Y$, aggregate demand curve will be AD_0 , if the ~~at~~ money wage changes to W_3 , eq. price changes to P_3
 \therefore supply of money, M_1 changes to M_2
- such that for $M_2 V = P_3 Y$, aggregate demand curve will be AD_1 . Or it can go the other way round i.e. if money supply changes then ultimately money wage will change such that real wage remains unchanged.
- But if money supply decreases below M_1 , then we will get another money wage less than W_0 and it is possible as money wages are flexible up & down.

* Summary (Classical Theory)

- An economy can attain full employment eq. automatically.

- Assumptions:

- (i) Laissez-Faire setup \Rightarrow Minimum intervention of the govt.
- (ii) Perfect competition in both product & factor market.
- (iii) Wages & prices are assumed to be flexible or product prices along with factor prices are assumed to be flexible.

~~is~~

- There is no imperfection in the labour or product market.
- Classical theory is based on ~~is~~ the supply side. (Supply creates its own demand).

- Derivation of aggregate supply curve:

- (i) Production function
- (ii) Demand of labour
- (iii) Supply of labour
- (iv) Money wage curve.
- (v) Aggregate supply curve of output } eq. price
- (vi) Aggregate demand curve of output }

- AS curve (perfectly inelastic)

Output is constant irrespective of the price & it is the full employment output.

- In economy, a/c to classical economists can attain eq. income automatically, any disturbances are shortlived, i.e. an economy will operate at full-employment ~~income~~, as long as wages ^{and prices} are taken to be flexible.
- A/c to above classical theory, entire income must be spent in demanding consumer goods.
- The whole income might not be spent on ~~dem~~ demanding consumer goods, some of it might be saved and it is a leakage ~~as~~ from the income as it is a refinement from the current consumption

* effects of change in the Supply of Money

- The output level is determined to be that output which is produced by a fully employed labour force and the price level at which the output sells is determined by the quantity of money.
- The full amount of money supply was in active circulation as a medium of ~~ex~~ exchange. The public does not hold money as a store of value.
- Absence of ideal money balance in the

rigid quantity theory found in the classical model.

- The money was used exclusively as a medium of exchange and thereby remain completely in active circulation, the velocity of money remain stable.
- With V and stable MV or total spending on goods and services is known as soon as M is known. This brings us the concept of AD in the classical model.
- An increase in the money supply produces a shift in the AD curve. The level of output is determined by the AS curve.
- The money supply only sets the price level for output.
- Increasing or decreasing the money supply will cause the price level of output to rise or fall proportionally but the level of output itself will remain unchanged at the full employment level.
- Any change in the money supply that is accompanied by a change in the velocity of money will break the proportion relationship between money & price.

- It will still leave the level of output & employment unaffected by changes in either money or velocity.

Effects of a change in the supply of labour.

- If money supply changes, then price changes and correspondingly real wage money wage will change in such a way that real wage remains constant, hence level of employment remains constant.
- Whenever, there is increase or decrease in the money supply then the general price level will change i.e. there will be inflation or deflation in the economy.
- If price level rises then there will be inflation & when there is decrease in price level then there will be deflation.
- Therefore, other factors remaining constant

P × M

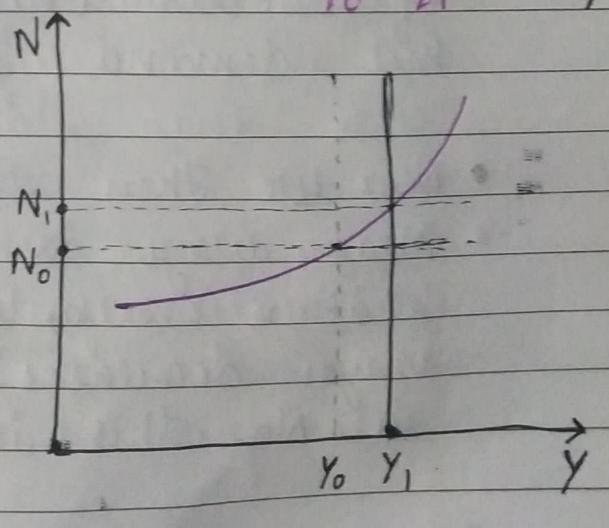
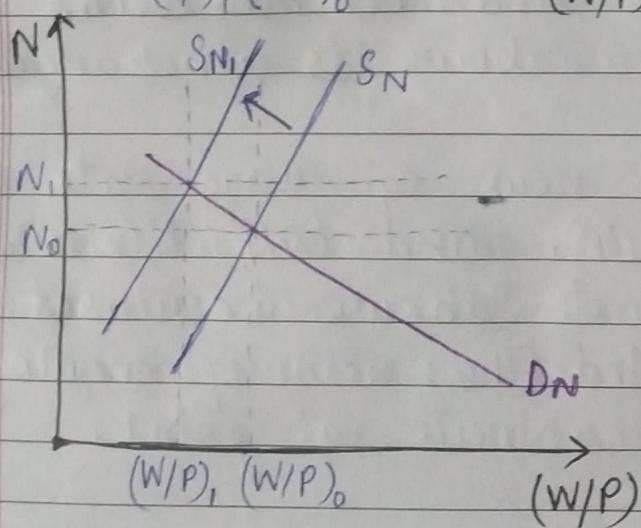
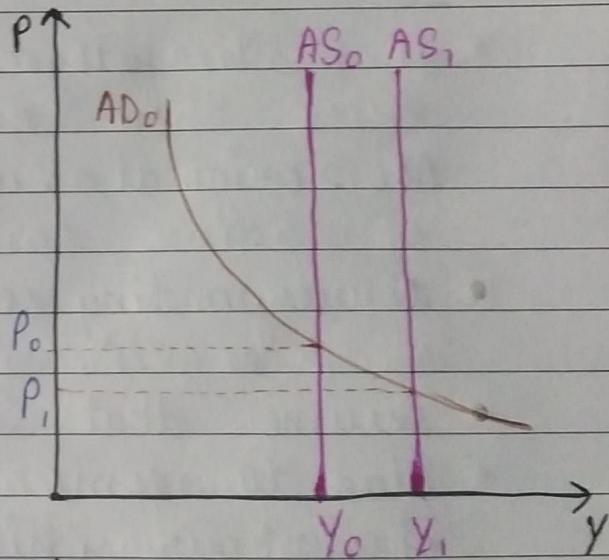
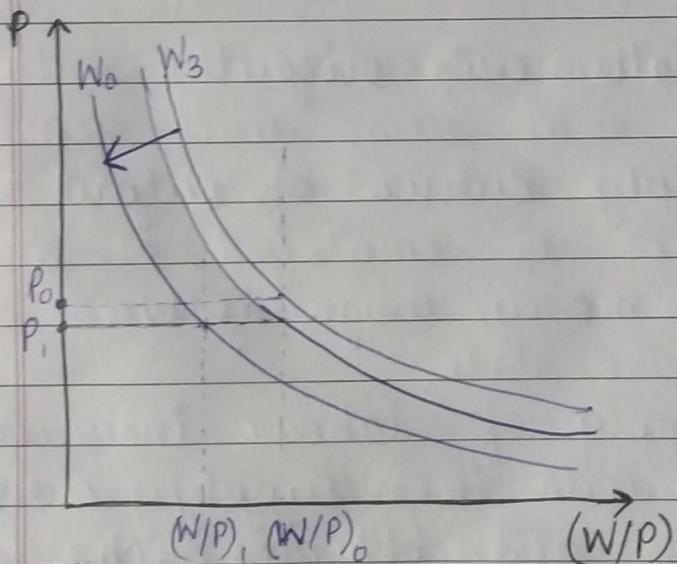
- But any change in money supply will not affect the eq. output or employment because corresponding to money wage, price level & money wage will change in order to keep real wage constant.

Effects of a change in the Supply of Labour.

- Given an increase in the labour supply, the crucial element of the process by which the system moves to its new equilibrium position is the adjustment that occurs in the money wage and the price level.
- Whether unemployment results from increase in the labour supply or for other reasons flexibility of the money wage and price level is indispensable to the correction of unemployment.
- As long as the money wage responds to unemployment and as long as the price level responds to changes in output, full employment can always be regained.
- Under *ceteris Paribus*, when wage rate rises, more labour is offered for sale, therefore ~~wage rate~~ rises. the supply of labour rises.
- But if *ceteris Paribus* is not followed, then other factors may change the supply of labour.

Factors that can affect the supply of labour:

- (i) Increase in Population - If there is increase in population, then there is an increase in the work force, therefore, an increase in the supply of labour can be expected.
- (ii) Increase in education - If level of education rises, then there will be increase in supply of skilled labour.



- $D_N \rightarrow$ original demand curve for labour, based on profit maximization of a firm ~~and~~ and considering diminishing MPP_L ∴ the output curve is concave upwards.
 - $S_N \rightarrow$ original supply curve based on utility maximization principle.
- $N_0 \rightarrow$ original eq. employment level.
 $S_N = D_N$.
- $(W/P)_0 \rightarrow$ Eq. wage rate all those who are willing to work are employed.

$Y_0 \rightarrow$ full employment output

$AS_0 \rightarrow$ original supply curve of output.

- Corresponding eq. money wage is W_3 .
- Assume that Supply of labour increases due to some reason i.e. supply curve of labour shifts and becomes S_N' . But demand for labour is unchanged.
- Then the new eq. wage rate or real wage is $(W/P)_1$ and $(W/P)_1 < (W/P)_0$. ∵ when supply of labour increases, real wage decreases. And the new eq. employment is N_1 . This is a new eq. point.

- Full employment eq. means that all those who are ready to work at the existing wage rate are employed.
- But if the number of people willing to work increases & they are again employed, then this is again new eq. employment. It is
- Full employment output is the output at which demand for labour is equal to supply for labour and all those who are willing to work are employed.
- Corresponding to N₁ amount of employment, output will be Y₁ i.e. eq. output has increased from Y₀ to Y₁.
- AS curve becomes a ~~vertical~~ straight line at Y₁. but as money supply remains constant AD will remain same.
 ∴ corresponding to AS₁, price level will change from P₀ to P₁.
- Supply has increased, demand remaining same, price level will fall.
- If money wage remains same as W₀, with price fallen from P₀ to W₁, real wage will rise.

- But as real wage will rise, demand for labour by the firm will decrease.
- But with the increased real wage, owners of labour will compete among themselves to work & this competition will bring the money wage down.
- ∵ the labour demand is low & supply is high, ∴ there will be competition among the owners of labour, therefore, as a result, real wage will start falling via the decrease in money wage.
- If money wage falls proportionally with the price, then the real wage will remain constant at $(W/P)_0$. But at $(W/P)_0$, N_0 amount of labour cannot be employed, N_1 amount of labour can only be employed at $\cancel{W_0} \leftarrow (W/P)_1$ wage rate.
- Real wage can fall to (W/P) , only when money wage falls from ~~W_0~~ to ~~W_1~~ to W_2 to W_3 i.e. money wage falls at a greater rate than price.
- Money wage should fall more than proportionally with the price level in order for the level of employment to rise from N_0 to N_1 .

- ∵ there is an increase in labour supply, then the eq. can be attained again at new employment level greater than the previous case.
- Even in the new eq. position, profit will be maximized for the firm, instead the profit will increase as output has increased.

Example:

	N	Y	W	P	$MPP_L = W/P$	M	V.
Original eq.	200	600	4.00	1.00	4.00	150	4
New eq.	300	800	2.25	0.75	3.00	150	4.

↓ inc. ↓ inc. ↓ dec. ↓ dec. ↓ dec. ↓ same ↓ same

- Output increases less than proportionately w.r.t input because we are considering diminishing diminishing MPP_L .

$$MV = PY$$

$$600 = (600)(1)$$

$$600 = (800)(0.75)$$