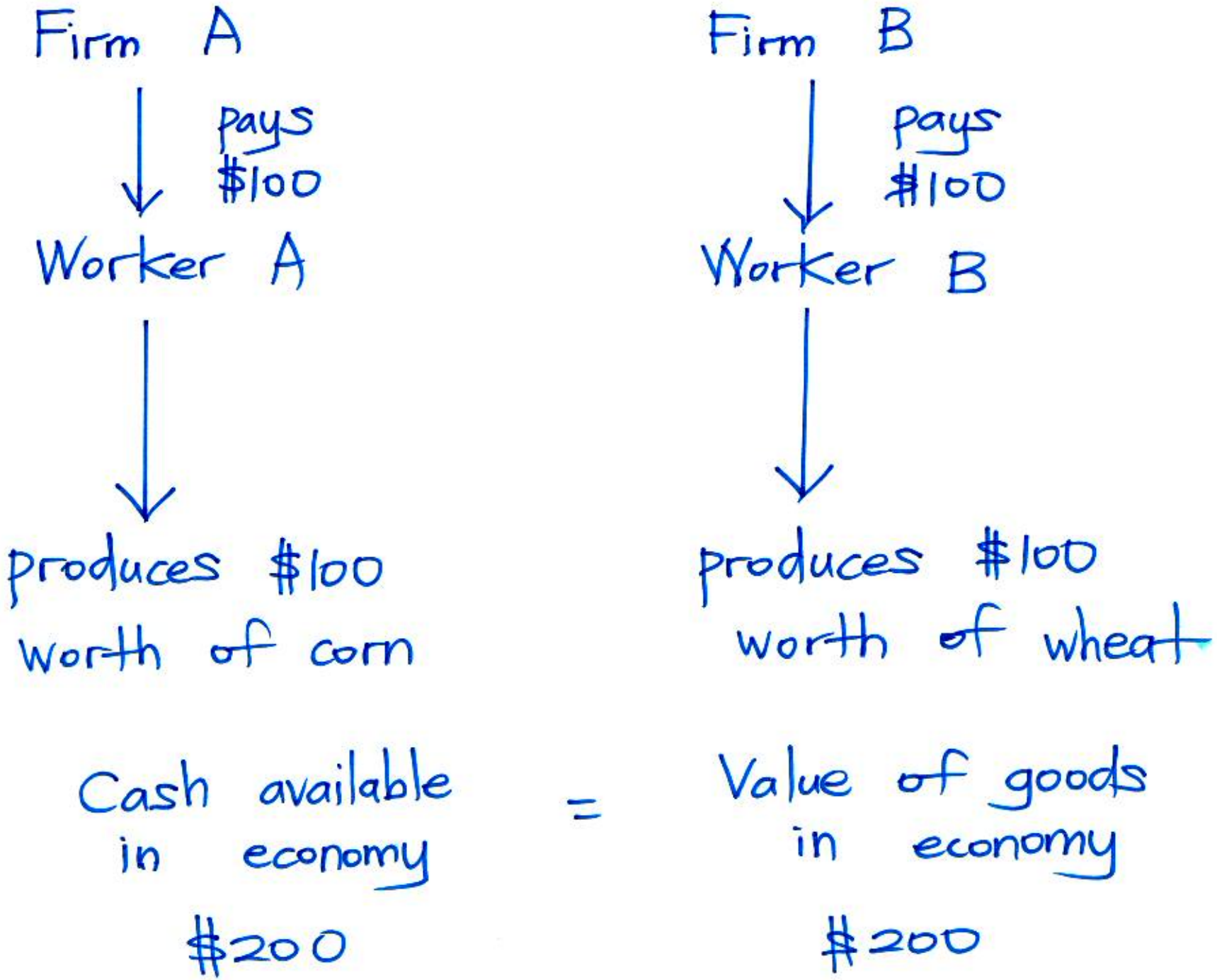
Say's Law

'supply creates its own demand'

'products are paid for with products'

'a glut can take place only when there are too many means of production applied to one kind of product and not enough to another'

⇒ every act of production creates income and therefore demand equal to the value of that production


Firm A
pays $100
Worker A
produces $100 worth of corn
Firm B
pays $100
Worker B
produces $100 worth of wheat
Cash available in economy
$200
=
Value of goods in economy
$200

The possibility exists that some income arising from production may not be spent immediately. ie. saved.

Interest rates are fully flexible to ensure all savings are channelled to investments

If $C \downarrow$, $S \uparrow$ $\Rightarrow$ $\downarrow r$

$\Rightarrow \uparrow I$ equivalent to $\downarrow C$

and vice versa

$\Rightarrow$ saving cannot cause a decline in spending and thus be responsible for more being produced than can be sold

All sellers are inevitably buyers

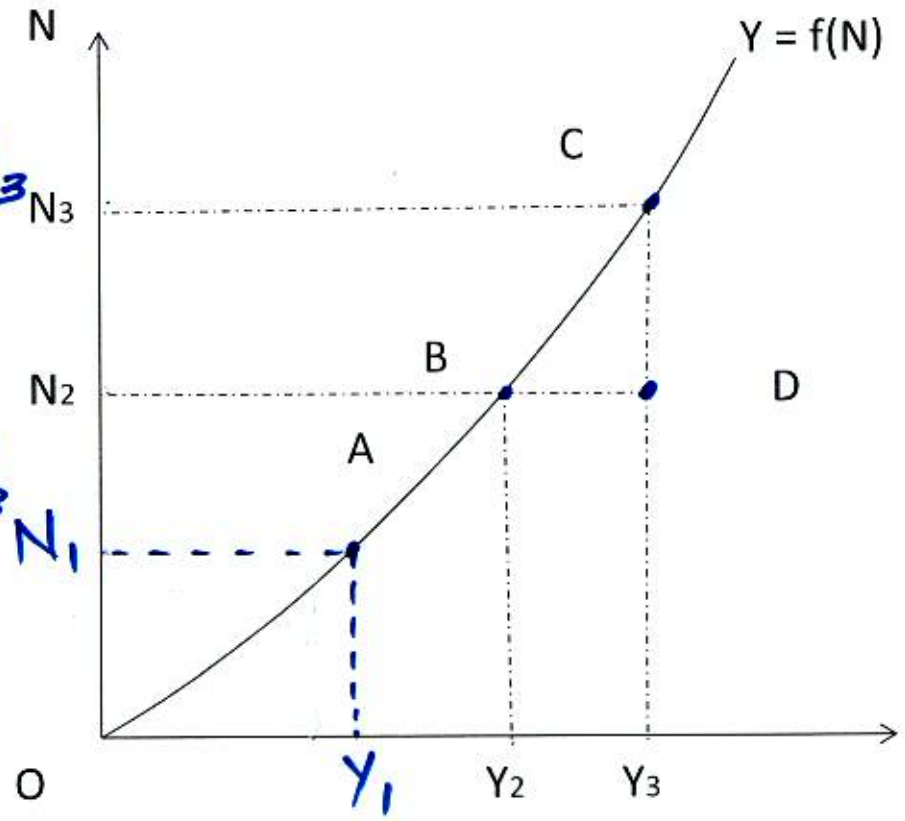
Double productive powers of country

⇒ Double supply of commodities in every market

⇒ Double purchasing power (demand)

⇒ Everybody would be able to buy twice as much, because everyone would have twice as much to offer in exchange.

Diagram 1



Production Function

$ON_1 = N_1N_2 = N_2N_3$

but

$OY_1 > Y_1Y_2 > Y_2Y_3$

Diminishing marginal productivity of labour

Never at D as extra output would remain as unsold stock of finished good

Supply of labour (S_N) = no. of workers willing to work at each wage rate

Demand for labour (D_N) = no. of workers that firms are willing to employ at each wage rate

$$\text{Real wage} = \frac{\text{Nominal wage}}{\text{Price Level}} \qquad w = \frac{W}{P}$$

D_N = derived demand

= firms pay workers no more than their MRP

$MRP = MP \times MR$

$= MP \times P$ (P = MR under perfect competition)

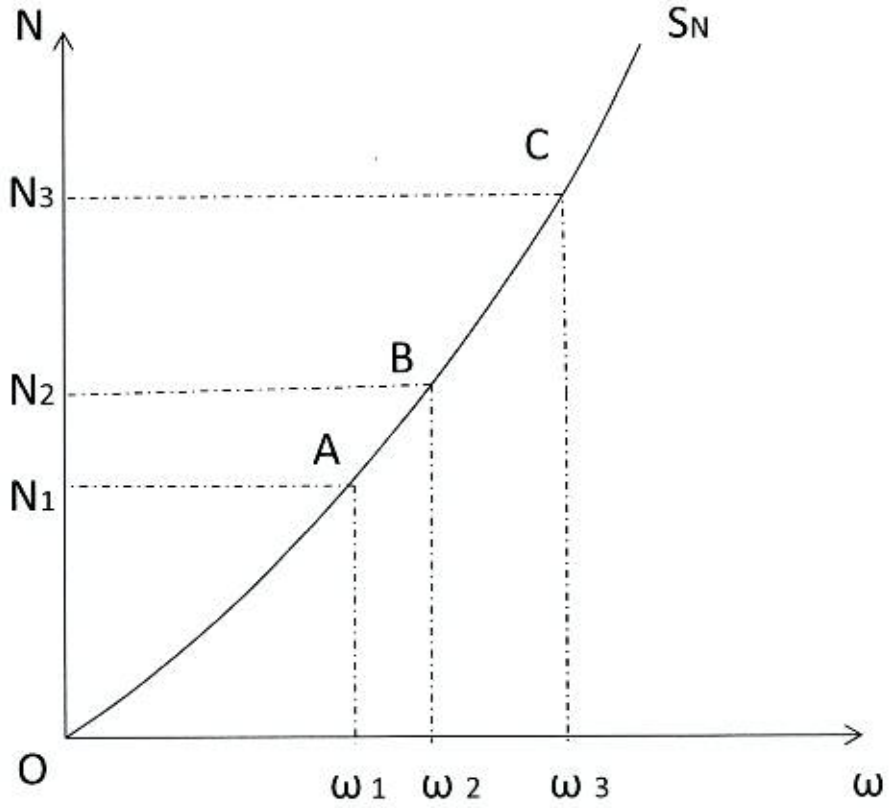
$\therefore \quad W = MP \times P$

$\frac{W}{P} = MP$ ie. Firms willing to pay workers a real wage equal marginal product of

$w = MP$

Diagram 2

↑ ω ⇒ ↑ N



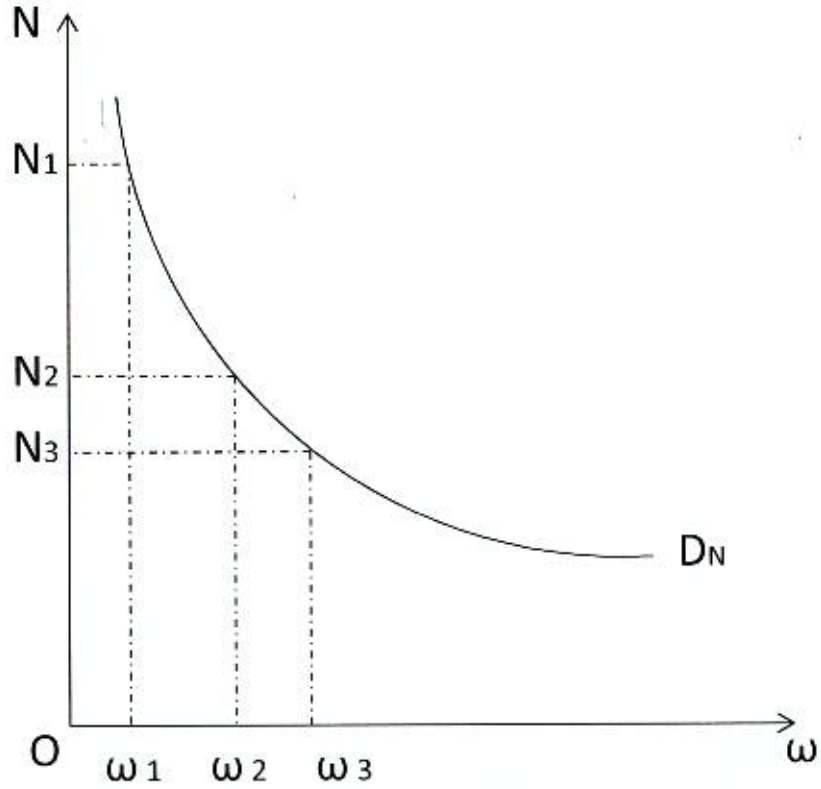
Labour Supply Curve

↑ S_N ⇒ S_N shifts up

↓ S_N ⇒ S_N shifts down

Diagram 3

↑ ω ⇒ ↓ N

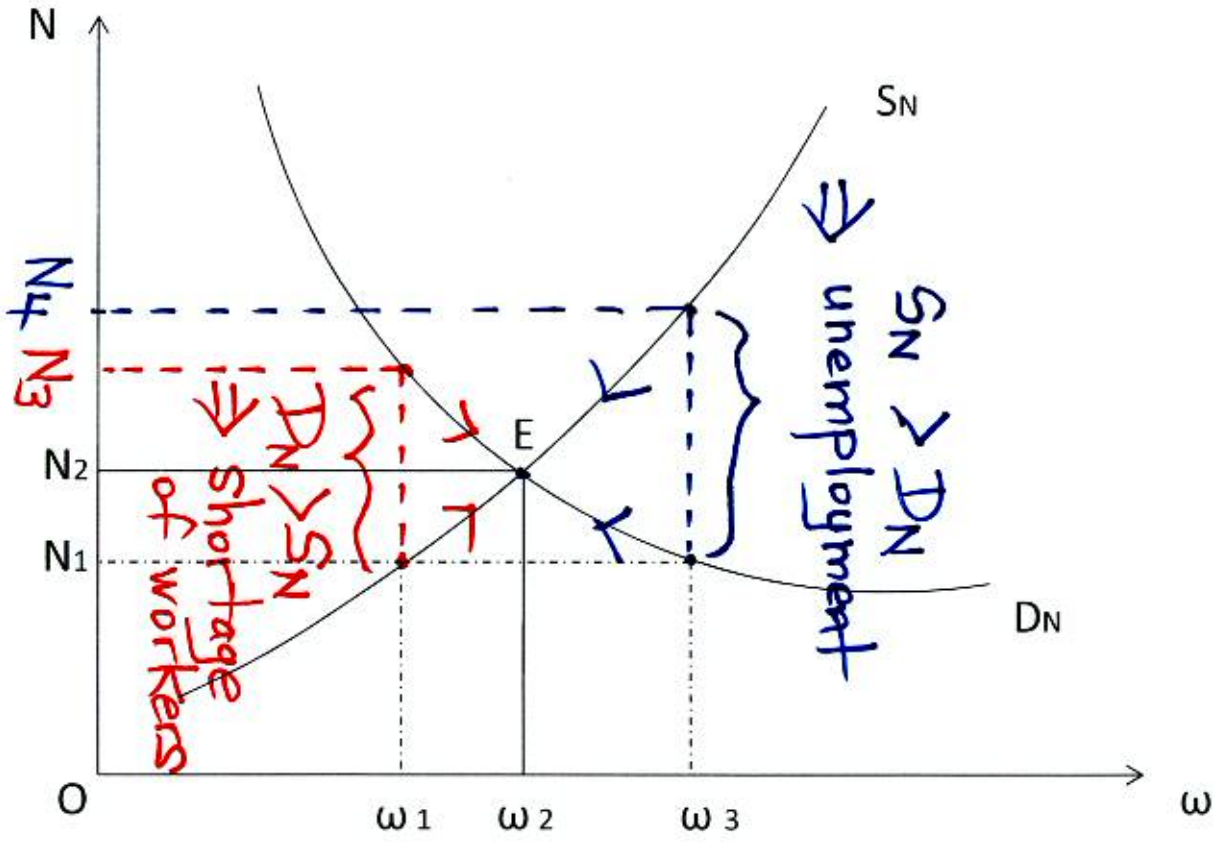


Labour Demand Curve

↑ D_N ⇒ D_N shifts up

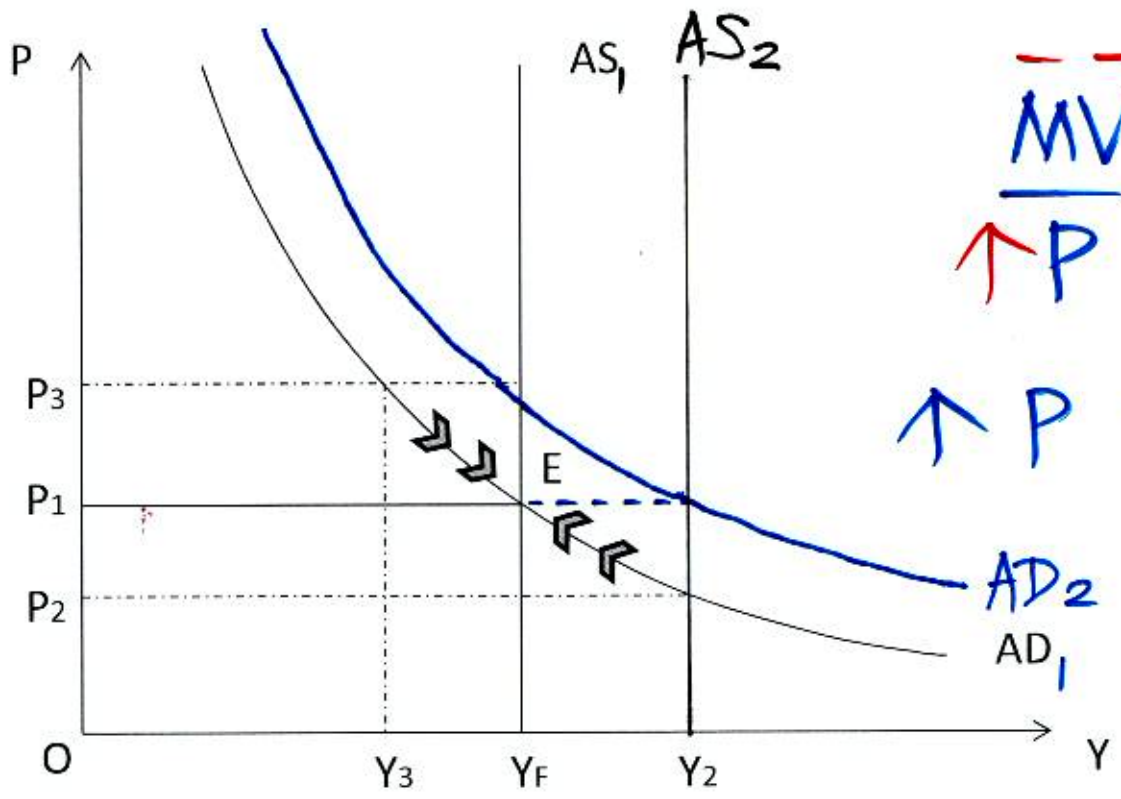
↓ D_N ⇒ D_N shifts down

Diagram 4



Labour Market Equilibrium

Diagram 5



$MV = PY$

$\frac{\overline{MV}}{\uparrow P} = Y\downarrow$

$\uparrow P \Rightarrow$ Buy less given fixed M and V

$\Rightarrow \downarrow Y$

Aggregate Demand and Aggregate Supply

↑ M ⇒ AD shifts right

At each P, Y ↑

Real wages are flexible and adjusts instantaneously to clear labour market

⇒ AS vertical, always at full employmer Y_f

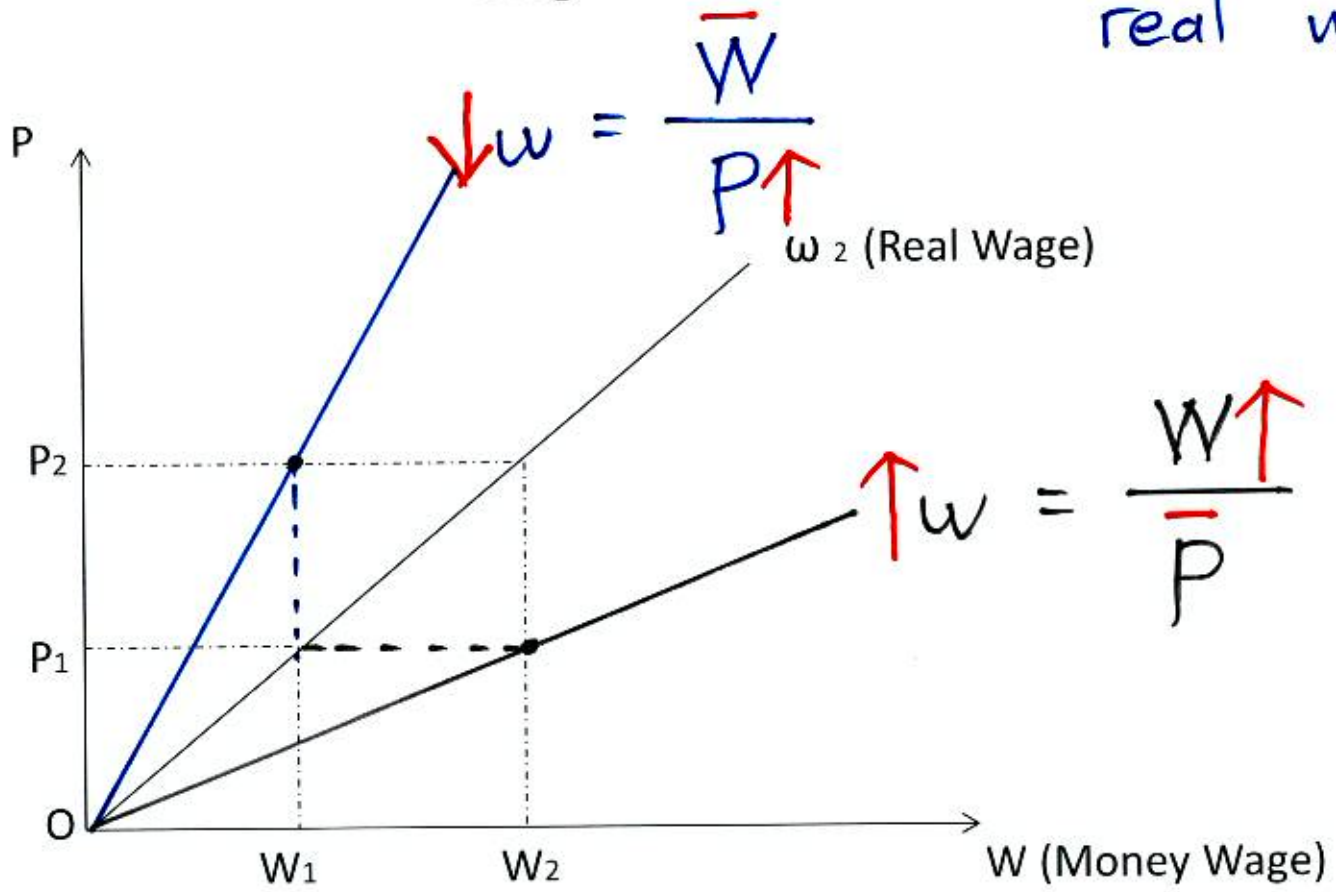
Economic agents do not suffer from money illusion

$\uparrow P \Rightarrow$ workers demand for higher money wage ($\uparrow W$)

$\Rightarrow$ no change in real wage, w

$\frac{1}{\text{slope}}$ measures real wage

Diagram 6

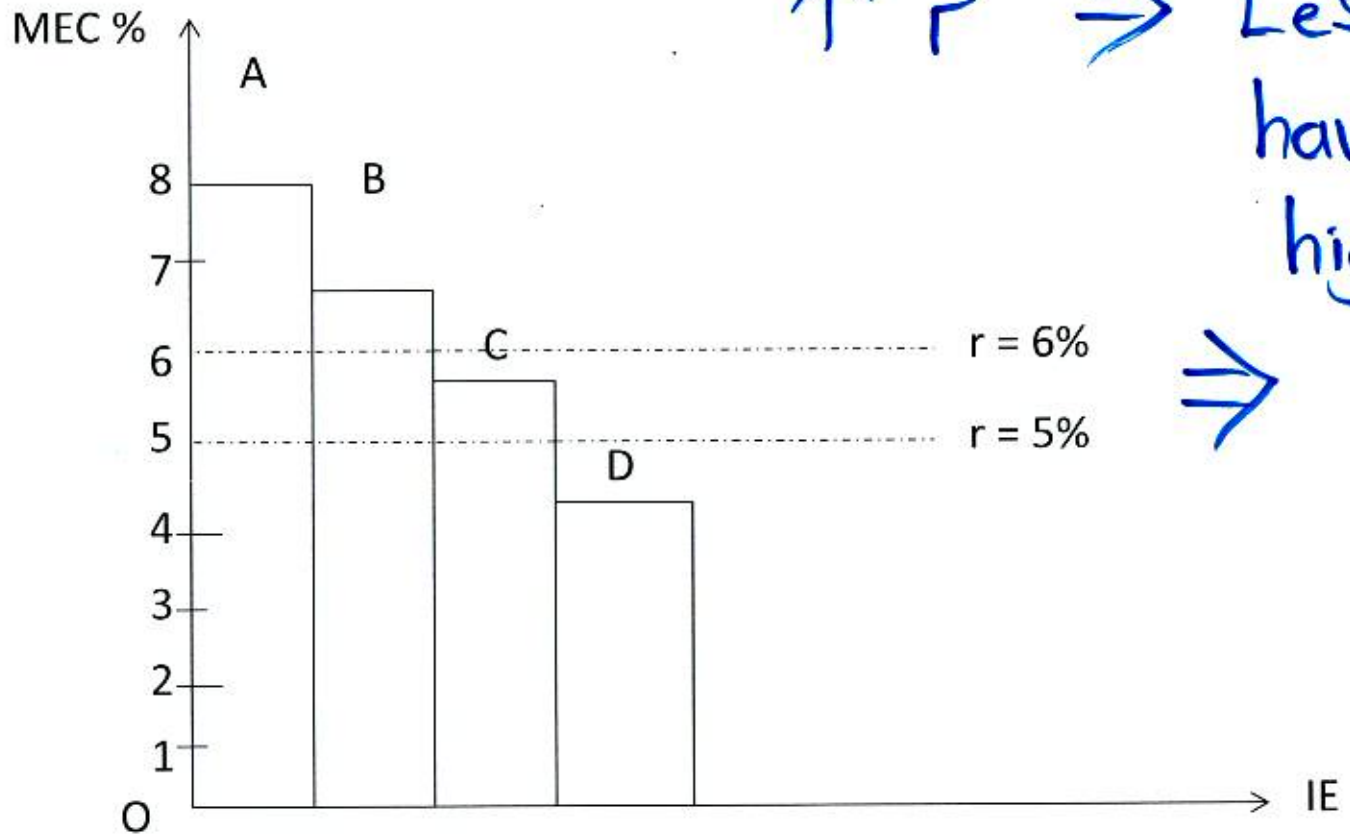


Money Wage Determination

$\downarrow \omega \Rightarrow$ real wage line pivots left (steeper)

$\uparrow \omega \Rightarrow$ real wage line pivots right (flatter)

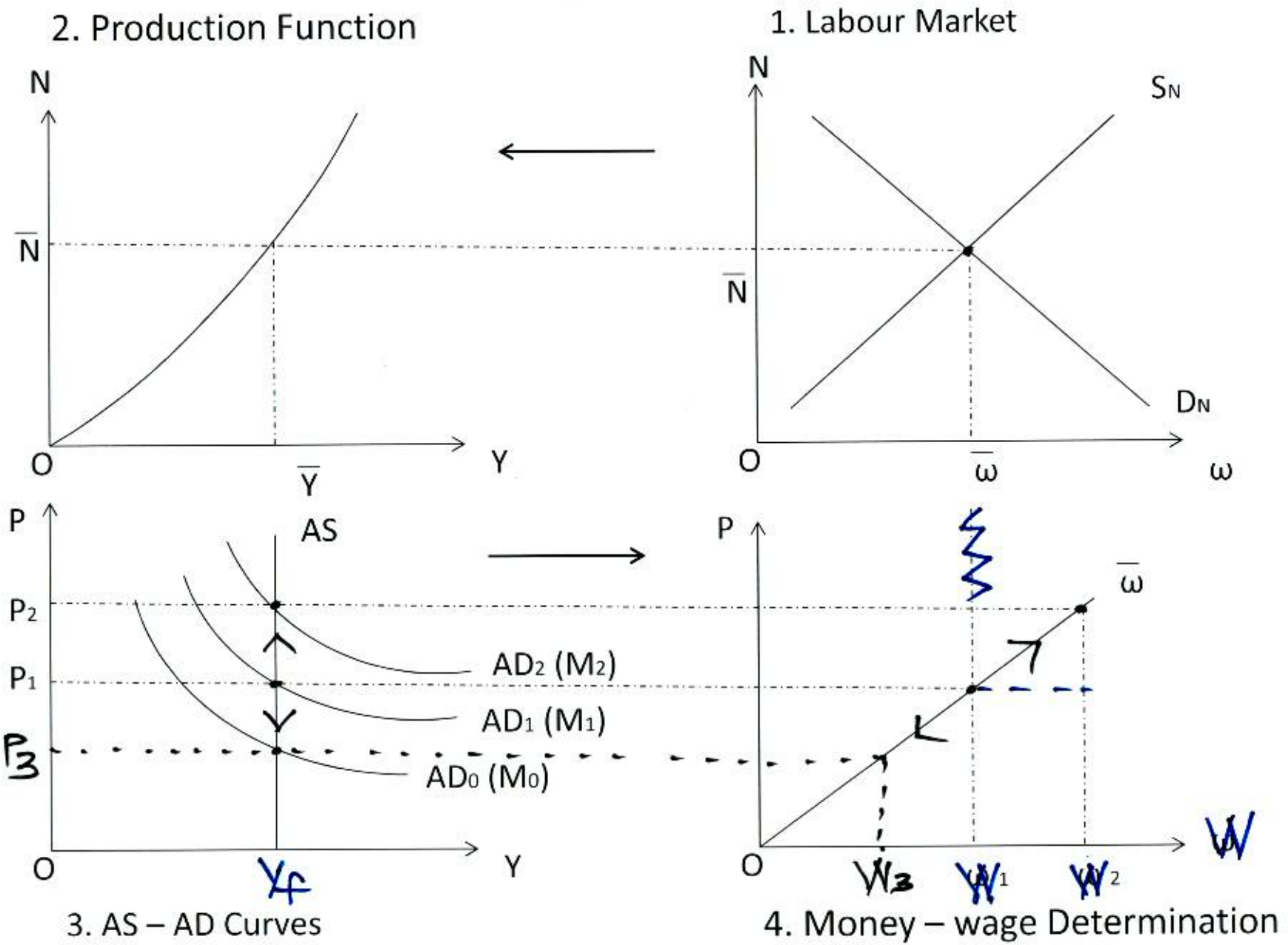
Diagram 8



↑ r ⇒ Less investments have MEC higher than r ⇒ ↓ I

Ranking of Investment Projects

Diagram 9


2. Production Function
1. Labour Market
N
$\bar{N}$
O
$\bar{Y}$
Y
N
S_N
$\bar{N}$
D_N
O
$\bar{\omega}$
ω
P
AS
P_2
P_1
P_3
AD_2 (M_2)
AD_1 (M_1)
AD_0 (M_0)
O
Y_f
Y
P
$\bar{\omega}$
O
W_3
W_1
W_2
W
3. AS – AD Curves
4. Money – wage Determination

Policy Implications of the Classical Model

1. Demand management policy is both ineffective and unncessary

(a) Monetary Policy

↑ money supply (M) ⇒ AD shifts right
Given vertical AS at full employment output level

⇒ P ↑ without change in Y

⇒ W ↑ without change in w

Monetary policy can affect the price level and nominal variables, like the nominal wage

but cannot affect real variables such as real output, employment or real wage.

Countries cannot "print" themselves to prosperity

Money in Hyperinflations

	Inflation rate (monthly)	Money growth rate (monthly)
Germany (1922-1923)	322%	314%
Greece (1943-1944)	365%	220%
Hungary (1945-1946)	19,800%	12,200%
Poland (1923-1924)	81%	72%
Zimbabwe (2006)	1,730%	

(b) Fiscal Policy

Government can increase spending by

(i) ↑ taxation

(ii) Borrowing from public (sell bonds to public)

(iii) Printing money ⇒ ↑M

↑ taxation ⇒ ↓ C , S↓⇒ ↓ I

⇒ offset ↑ G

↑ G financed by selling bonds
⇑ r
⇑ crowds out equal amount of C and I
r
r_0
r_1
i_1
$i_0 = S_0$
S_1
H
H_1, S_1
$H + \Delta G$
S
ΔG
I
S
C

2. Supply is key to Economic Growth

Higher level of real output is a 'supply-side' issue and demand stimulus won't work.

↑ technology

↑ S_N (influx of immigrants)

↑ capital

Relevance to current labour market policy debate :

Minimum wage

Strong unions

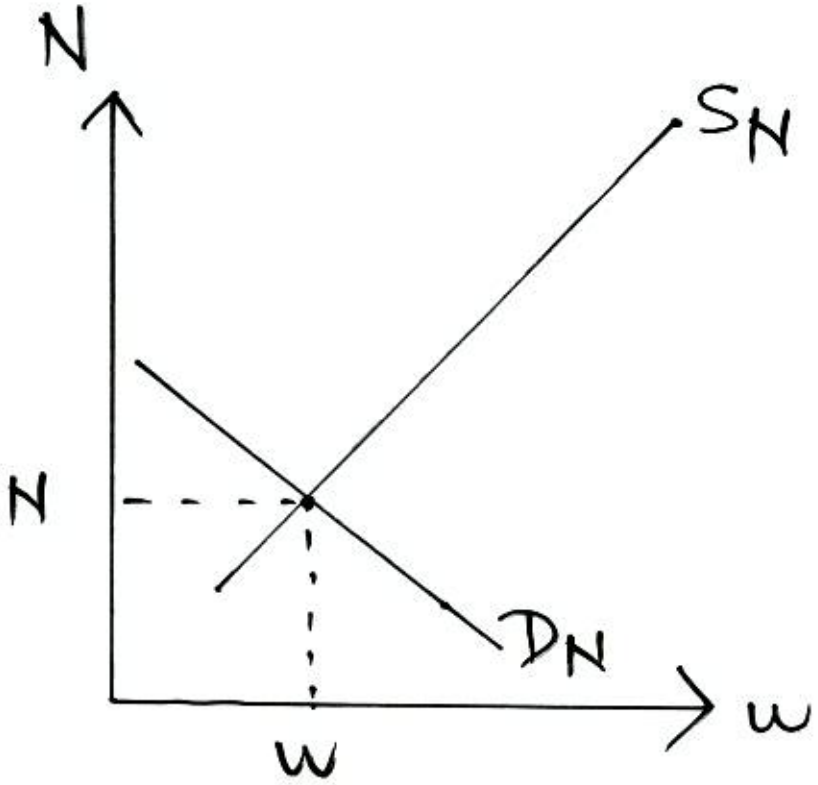
Unemployment insurance laws

Labour training policies

All unemployment is 'voluntary'
- workers choose to remain unemployed

If MP_L is very low, demand for labour is low

$\Rightarrow$ real wage is low



'Voluntary' unemployment does not mean it's not painful

Great Depression (1929 - 1939)

Money wages and prices proved to be extremely flexible downward during the collapse (1929 - 1933) but this flexibility did not prevent output and employment from dropping sharply.

Also, the Federal Reserve discount rate declined by 83.7% but gross private domestic investment spending collapsed almost totally.

Set the stage for the Keynesian model in 1936