

# CH. 33

\* Money creation, single bank.

\* Assets = liabilities + Networth.

A	Bank A	L + NW
Cash <del>200</del> 250	250	Stocks
Property 50	100	deposits
RRR 10% (10)		
Excess reserve 290		
(Cash + 100 - 10)		
Loan 190		
Bonds 100		

\* Liquidity (Loans + Deposits + Bonds)

\* RRR:- Require Reserve Ratio

loans supply decreases, RRR increases  
money supply decreases

\* if money supply money increase  $\Rightarrow$  inflation

Ex:-

Bank A		L + NWt
RR	+ 10	+ 100 deposit
Loans	90	

if RRR is 10%

Bank B		
RR	+ 9	+ 90
Loans	81	

Bank C		
RR	8.1	+ 81
Loans	72.9	

\* Money creation =  $\frac{1}{RRR}$  \* initial deposit  
Multiplier

$$= \frac{1}{0.1} \times 100,000 = 1M$$

\* if RRR decreases then money supply increases.

\* لا يكون في نظام تقويم البنوك برفع RRR

\* if RRR increase then interest rate increase.

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\* if RRR increase then excess reserve decreases,  
and loans decreases and investment decreases.

\* في الرفع والكمال البنك يقلل ال RRR .

الو يحدد ال RRR هو البنك المركزي .

\* في حالة الارتفاع  $\Rightarrow$  decrease RRR .

\* Money supply  $\leftrightarrow$  RRR :- علاقة عكسية



## ابوسعبد CH. 34

\* Interest rates and monetary policy.

\* interest rates :- Costs of borrowing.

وهو النسبة المقررة والنسبة للبنك أيضاً.

\* federal fund rate ... Discount rate.

\* fiscal policy :- is when taxes are reduced

and spending is increased if there is a recession

and the opposite if there is inflation.

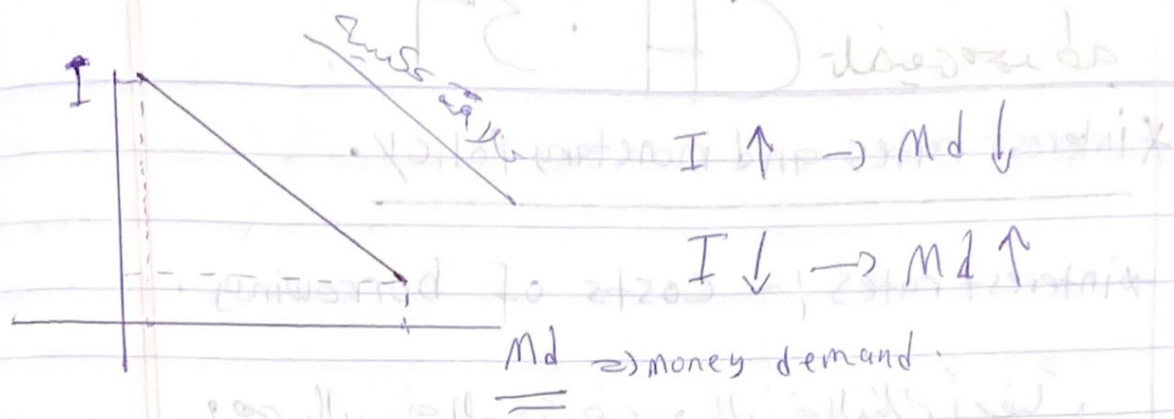
\* monetary policy :- refers to the action undertaken by nation's central banks to control money supply

to achieve sustainable economic growth.

\* Demand for money :- Cash + current account

\* interest rate for current account = Zero

\* negative relationship between money demand and interest rate.



السبب في زيادة الطلب على النقود

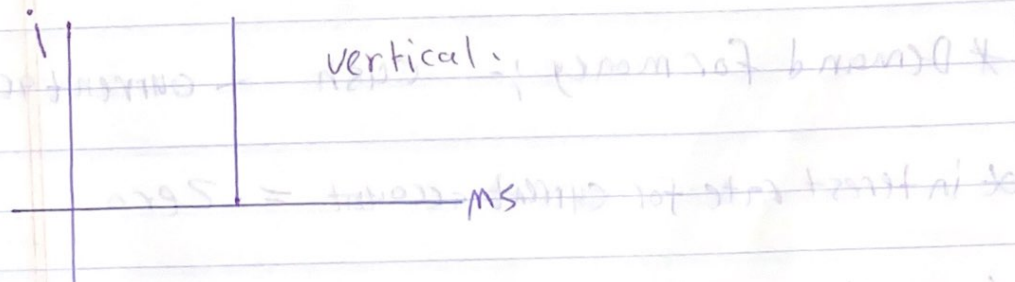
- 1] daily transaction, { Determined by nominal GDP, independent of the interest rate.
- 2] assets demand, { money as a store of value, varies inversely with the interest rate.
- 3] Precautionary reason.

\* who do money supply ; -

Central bank and commercial banks.

\* Who do money demand ; -

\* interest rate cannot effect to money supply





money supply  $>$  money demand :- low interest .

money supply  $<$  money demand :- high interest .

money supply  $\overset{\text{equilibrium}}{=}$  money demand :- fixed interest .

\* Tools of monetary policy :-

\* to stabilize the economy through inflation ,

unemployment, exchange rate .

\*  $\text{المال المركزي في السوق}$  money supply -  $\text{معدل الفائدة}$  interest rate

\* where high unemployment ? ?

increase in money supply .

how ?  $\boxed{1}$  RRR (Required reserve rate) .

$\boxed{2}$  DR (Discount rate) .

$\boxed{3}$  OMO (open market operations) .

\* if we have recession / unemployment is high?

in this case central bank has to :-

1] Reduce RRR :- if RRR decrease then the

Excess reserve increase, loans supply capability

increases, interest rate decreases.

loans increases  $\Rightarrow$  money supply increases, more

consumption and investment GDP becomes higher  
( recovering )

2] reduce Discount rate :- ~~DR~~

DR :- interest paid for central bank by commercial  
banks while borrowing.

\* if DR decreases then borrowing from central

bank increase then interest rate decreases,

money supply increases, loans increases.





3] OMO :- Open market operations :-

Purchase / sale of government securities /  
issuing bonds.

\* When central bank purchases bonds from  
commercial banks, money supply increases.

\* When inflation occurs :- سوق النقد المركزي  
من صودت تفر

- 1] increase in RRR.
- 2] increase in DR.
- 3] central bank sells government securities / bonds.

\* Money supply and unemployment (كثافة عكسية)

if MS increase then interest rate decreases then  
demand for loans increases then investment

increase, output increase and employment increase

then unemployment decreases.



OMO:- sells bonds

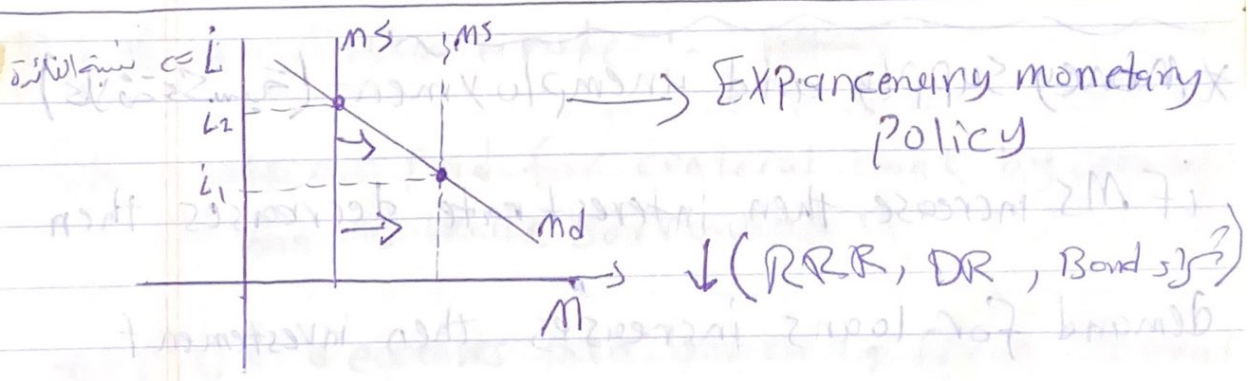


RRR ↑

DR ↑

\* Money supply and inflation ?  $\rightarrow$  as  $\rightarrow$

if  $M_s$  decreases then interest rate  $\uparrow$  then interest rate increase then loans demand decreases then investment decreases then output decreases then employment decreases then unemployment  $\uparrow$  increase then income decreases then consumption decreases then price tend to decrease then reduction in inflation rate.



II  $M_s \uparrow \rightarrow i \downarrow \rightarrow Inv \uparrow \rightarrow Y \uparrow$   
 $\rightarrow$  unemp  $\downarrow \leftarrow GDP \uparrow \leftarrow Income \uparrow$   
 $P \uparrow$