Chapter No → 15.

[QUANTITY THEORY OF MONEY]

QNo1. Define the quantity theory of money.

[OR]

Explain the fischer theory of money. what are the Critism of professor keynce against fischer theory.

[OR]

Show the relationship between money Supply, price level and Value of money.

Ans →: This theory was developed by the classical thinkers like Adam Smith, Recardo, J.S. mill, but it is popularished by Irving fischer.

⇒ Statement of theory :- According to this theory the Value of money changes inversely and the price level directly due to the changes in quantity of money, if other thinks remains Constant.

According to professor tausing,

"Double the quantity of money leads to price will be twice as high as before and Value of money becomes one half.
half the quantity of money leads to price will be half as before and Value of money doubled."
If other think remains Constant.

Quantity of money | General price level | Value of money

Direct Relationship.

Inverse Relationship.

Double ↑ or half ↓ | Double ↑ or half ↓ | half ↓ or Double ↑

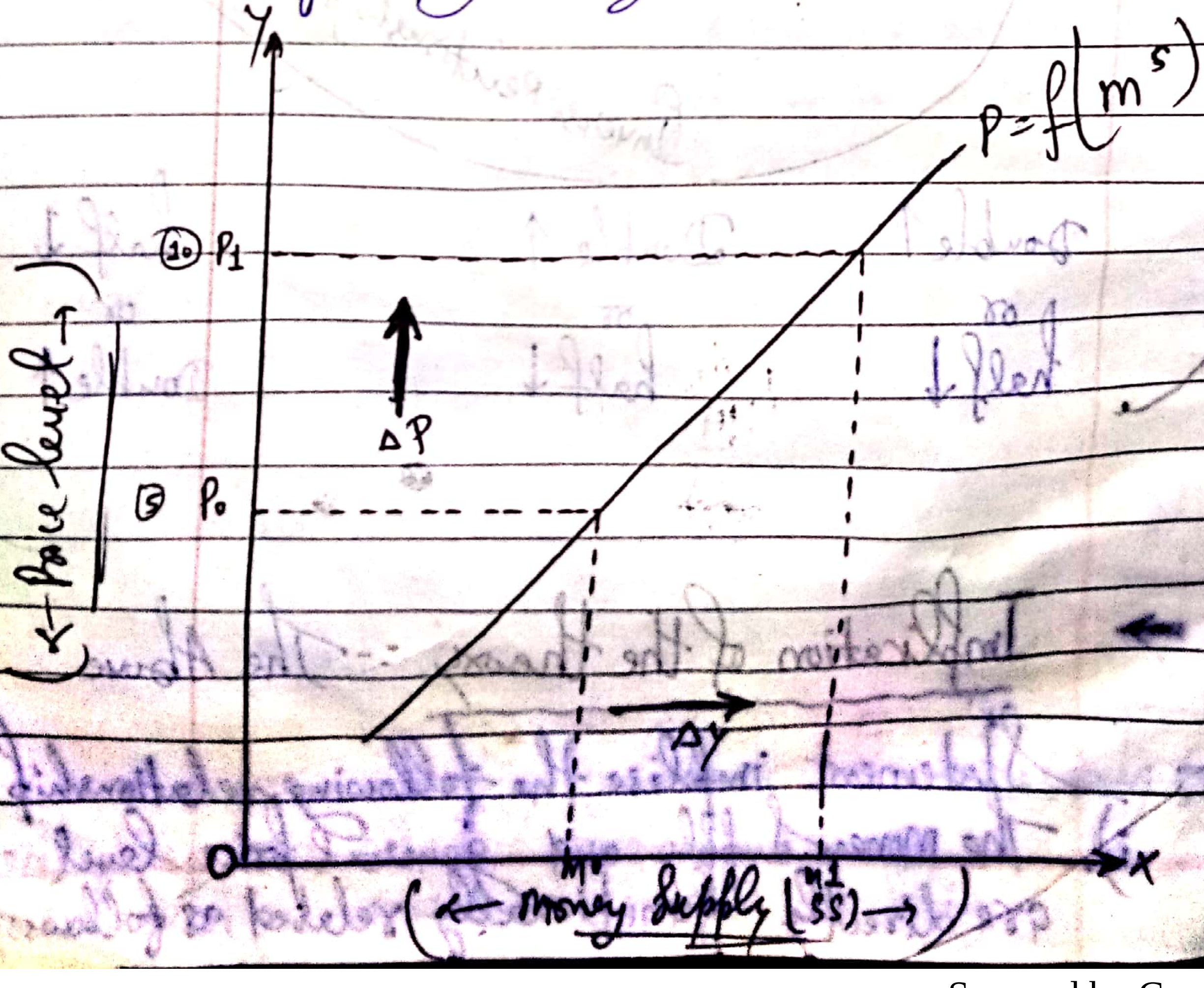
→ **Implication of the theory** :- The Above Statement implise the following relationship
(i). The money Supply and general price level are directly functionally related as follo...

$$\boxed{P = f(M^s)}$$

here,

P = denoted the "price level" and M^s = money supply.

If money supply increase, the price level also increases and with decrease in money supply, the price level also decreases but exactly in the same proportion that means if money supply is doubled, price level also doubled this can be shown with the half of following diagram:



When the total quantity of money in Circulation is M_0, the general price level is P_0. When quantity of money doubled from M_0 to M_1, the price level rises from P_0 to P_1.

Here, proportionate change in money

$$\left[\frac{(M_1 - M_0)}{M_0} \times 100\right]$$

is equal to the percentage (%) change in price $\left[\frac{(P_1 - P_0)}{P_0} \times 100\right]$.

The Money Supply and Value of money are inversely related.

Symbolically

$$\boxed{\frac{1}{P} \; f(M^s)}$$

here,

$\frac{1}{P}$ denotes Value of money &

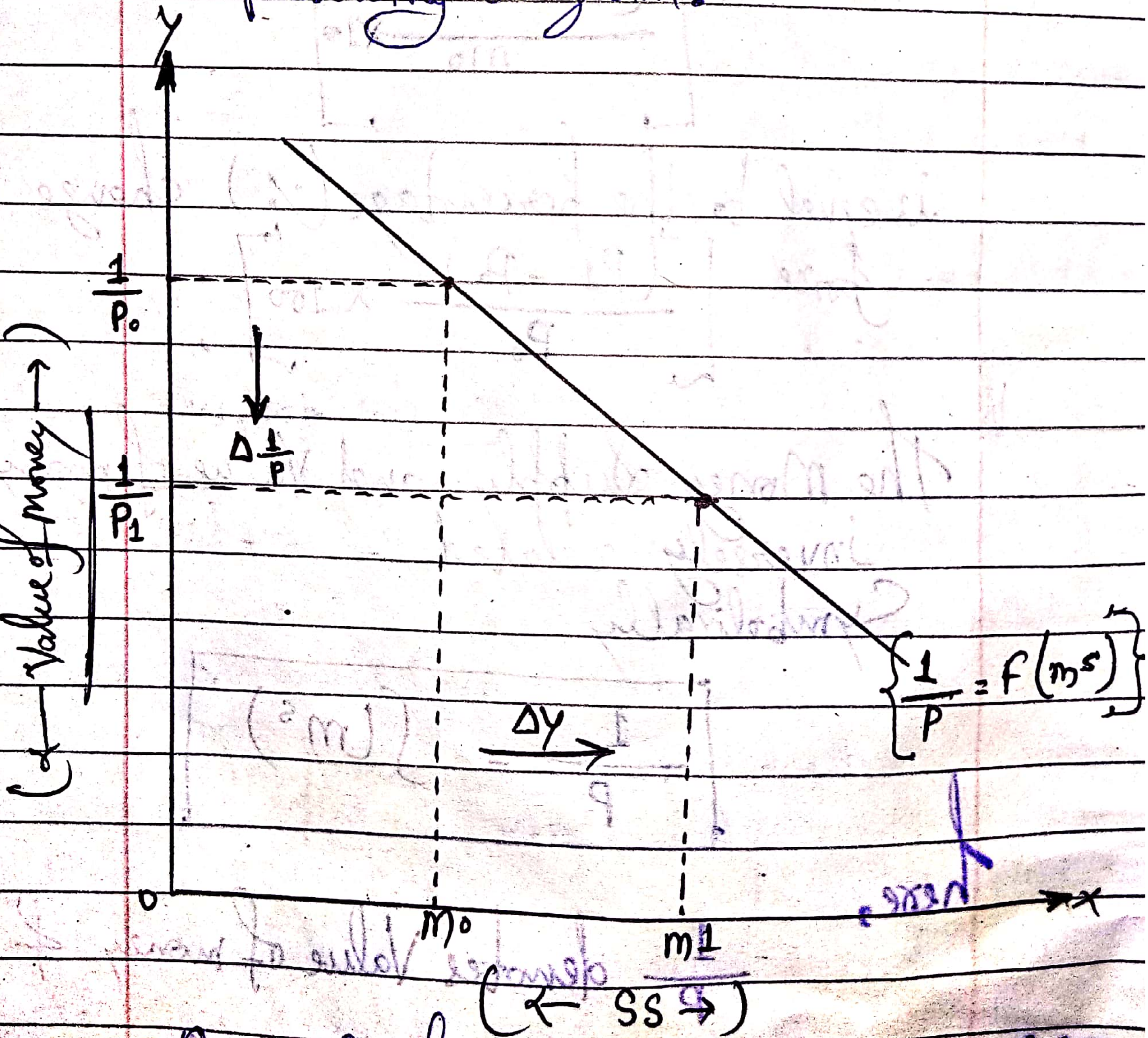
M^s is money supply.

If the quantity of money rises, the Value of money falls and with the fall in quantity in money, the value of

Money rises :

futher it is noted that if quantity of money is doubled than the value of Money, ~~becomes~~ becomes half,

This can be shown with the help of following diagram.



Original of money is $\frac{1}{P}$ at a money supply M_0 with the increase in money supply from M_0 to M_1 than the value of money falls from $\frac{1}{P_0}$ to $\frac{1}{P_1}$.

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thus, the quantity of money and value of money and value of money is inversely related.

Equation of quantity theory of money:-

professor fischer presented on equation to explain the quantity theory of money as given below.

$$\boxed{PT = MV + M'V'}$$

here,

PT = demand for money
MV = supply of money
$M'V'$ = Credit supply of money.

This equation can also be represents as follows:-

$$\boxed{P = \frac{MV + M'V'}{T}}$$

here,

P = price level
T = Volume of Transaction during a given periog
M = money in circulation
M' = Volume of Bank deposit

V = Velocity of money.
V' = Velocity of Bank deposit.

here, fischer assumed that be V' and T remains Constant during the short run and price passive factor who depends upon the money supply.

Example

↳ Suppose that $M = 1000$, $M' = 5000$, $V = 5$ and $V' = 1$ and $T = 1000$ than Price level and Value of money determined as follows:-

$$P = \frac{1000 \times 5 + 5000 \times 1}{1000}$$

$$= \frac{10,000}{1000}$$

$$= 10$$

$\therefore P = 10$

and Value of money $= \frac{1}{P}$

$\Rightarrow \frac{1}{10} = \boxed{.10}$

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Suppose that

M & M¹ doubled

$M = 2000$ $T = 1000$

$M' = 10{,}000$ $V = 5$

$V' = 1$

$$P = \frac{M \times V + M' \times V'}{T}$$

$$P = \frac{2000 \times 5 + 10{,}000 \times 1}{1000}$$

$$= \frac{20{,}\cancel{000}}{1\cancel{000}}$$

$$= 20$$

$$\therefore P = \underline{\underline{20}}$$

and Value of Money $= \frac{1}{P}$

$$= \frac{1}{20} = \boxed{.5}$$

4.

Critism of fischer theory

The quantity theory have been widely Cristism specially by professor keyence the main Cristism as follows:-

(1.) Theory is based upon unreal assumption that is fischer as assume that V, V' and T remains Constant which Can not be possible.

(2.) According to fischer price is a passive factor which influence by money supply but inreal position money supply also effected by price level.

(3.) Non monetary factors ignored. professor fischer himself has agreed that their are money other factors besides money supply which influence by the price like, population, level of income, propensity of Consume etc...

(4.) proposional relation of the money supply and price level does't exactly ~~and price level~~ because not always neccessary the price level must be change equal in the same proportion

5). Money Supply and price level are directly related but effect of money Supply on price will not affect immediatly.
professor keyence explains this relation as follows :-

change in money SS → change in rate of Interest → change in Investment → change in Employment & production → change in price → change in price