



Q3: What is transaction demand for money? How is it related to the value of transactions over a specified period of time?

Ans: Transaction demand for money refers to the demand for money for meeting day to day transactional needs. As money is a liquid asset (easily acceptable or exchangeable), everyone has the tendency to hold money. People earn incomes at distinct points of time but consume throughout the entire period. So, people tend to hold money for transaction purposes.

Ans: Nominal GNP = Rs.2500

Real GNP = Rs.3000

$$\text{GNP deflator} = \frac{\text{Nominal GNP}}{\text{Real GNP}} \times 100$$

So,

$$\text{GNP deflator} = \frac{2500}{3000} \times 100$$

$$= 83.33\%$$

No, the price level has fallen down by 16.67 %
[(100 – 83.33) %].

The transaction demand for money in an economy (M_T^D) can be written as:

$$M_T^D = K T$$

$$\text{Or, } \frac{1}{K} M_T^D = T$$

$$\text{Or, } v M_T^D = T$$

Where,

$v = \frac{1}{K}$, represents velocity of circulation of money

T = Total value of transactions in the economy over a period of time

K is a positive fraction

M_T^D = Stock of money people are willing to hold at a particular point of time.

The transaction demand for money is positively related to the total value of transactions and negatively related to the velocity with which money is circulated.

Q4: Suppose a bond promises Rs.500 at the end of two years with no intermediate return. If the rate of interest is 5 per cent per annum what is the price of the bond?

Ans: Let the price of bond be Rs. P

We know that,

The relationship between the value of transactions and transaction demand for money can be explained as:

$$A = P \left(1 + \frac{r}{100} \right)^n$$

It is given that

$$A = \text{Rs. } 500$$

$$r = 5\%$$

$$n = 2 \text{ years}$$

Substituting the values in the formula

$$500 = P \left(1 + \frac{5}{100} \right)^2$$

$$\text{Or, } 500 = P \left(1 + \frac{5}{20} \right)^2$$

$$\text{Or, } 500 = P \left(1 + \frac{21}{20} \right)^2$$

$$\text{Or, } 500 = P \left(\frac{441}{400} \right)$$

$$\text{Or } P = \frac{200000}{441} = 453.51$$

So, $P = \text{Rs } 453.51$

Therefore, Price of the bond is Rs. 453.51.

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