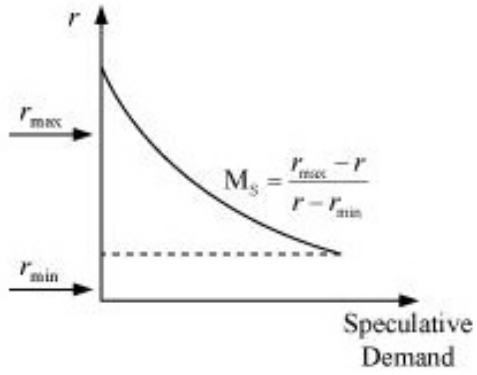
Q5: Why is speculative demand for money inversely related to the rate of interest?
Ans: People have the tendency to hold wealth by means of property, bullion, bonds, etc. A person holding bonds can confront various fluctuations in the market in the form of capital gains or capital losses. The demand for money in order to meet these speculative needs is defined as speculative demand for money. Interest rate represents the opportunity cost of holding the money. The speculative demand for money is inversely related to the interest rate. When interest rate on securities is very high then people expect interest rates to fall in future. This implies that in future bond prices will rise indicating capital gain to the bond holders. To maximize the capital gain, more people will convert their cash balances into bonds, thereby leading to a low speculative demand for money. On the contrary, when interest rates are low, people expect interest rates to rise in future, then bond prices will fall in the future, indicating capital loss to the bondholders. Hence, to minimize the capital loss, people tend to convert bonds into money, resulting in high speculative demand for money. This shows that the speculative demand for money is inversely related to the interest rate.

Q6. What is `liquidity trap'?
Ans: Liquidity trap is a situation in which speculative demand function is infinitely elastic; it is explained as follows:
The price of a bond has an inverse relationship with the market interest rate. If the interest rate is very high and people expect it to fall in the future, then the bond prices will rise being inversely related to the interest rate. In order to earn capital gains in future, people will purchase bonds (as bonds are cheaper) and hence the speculative demand for money will become low. On the contrary, if the interest rate is low and people expect it to rise in future, then the bond prices will fall and in order to avoid capital loss, people will sell their bonds and convert their bonds into idle cash balances. Liquidity trap is an extreme case of the latter situation. When the interest rates are very low, then everyone expect interest rates to go up in future. Thus, to avoid capital loss, everybody prefers to maintain cash balance and not bond. Consequently, the speculative demand for money is infinitely elastic. In this situation, if the additional money is pumped into the economy, then, this will only satisfy the thirst for money, without increasing the demand for bonds. Pumping additional money in this situation will further exaggerate the condition as this will further reduce the interest rate below .

The relationship between speculative demand for money and the rate of interest is given as:

$$M_s^d = \frac{r_{max} - r}{r - r_{min}}$$



In the above diagram, interest rate is represented on the vertical axis and speculative demand on the horizontal axis. When r = r min, the economy is in liquidity trap, where the speculative demand for money is infinite elastic.

********** END **********