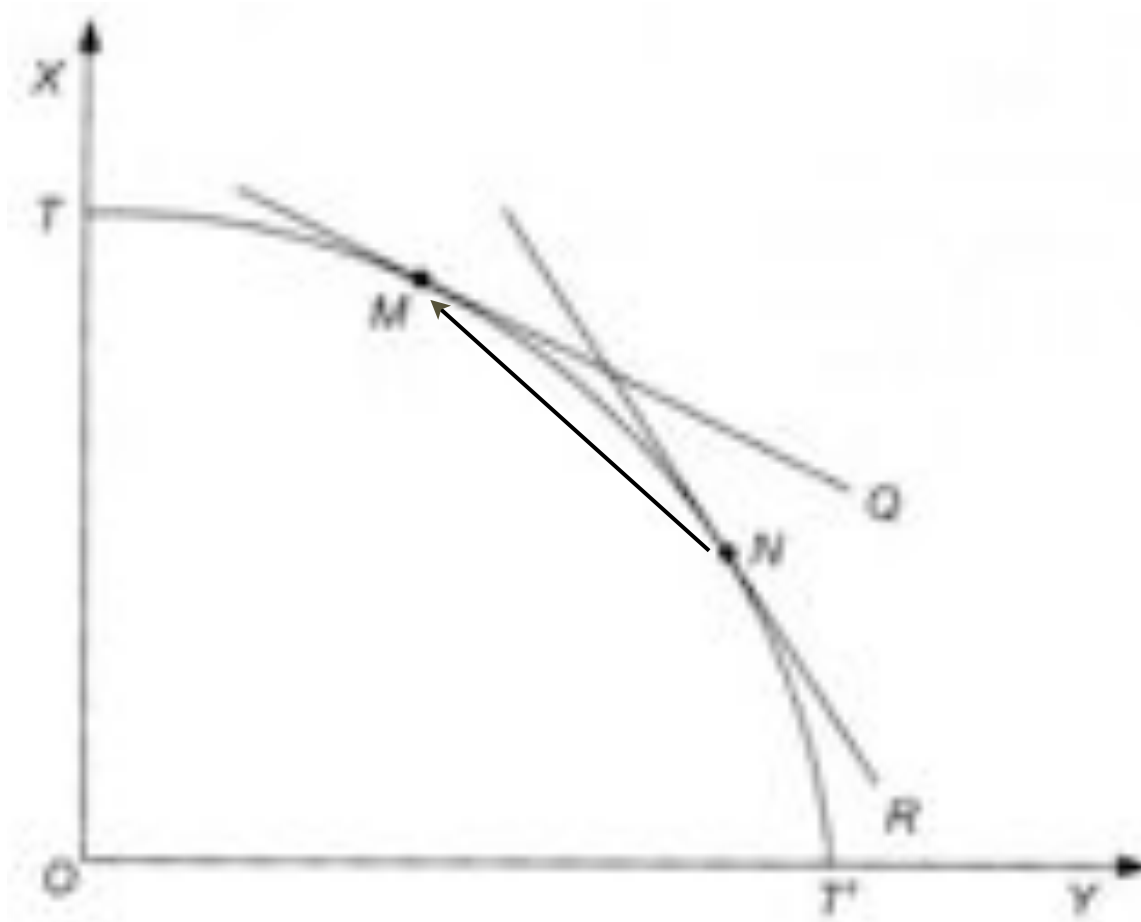
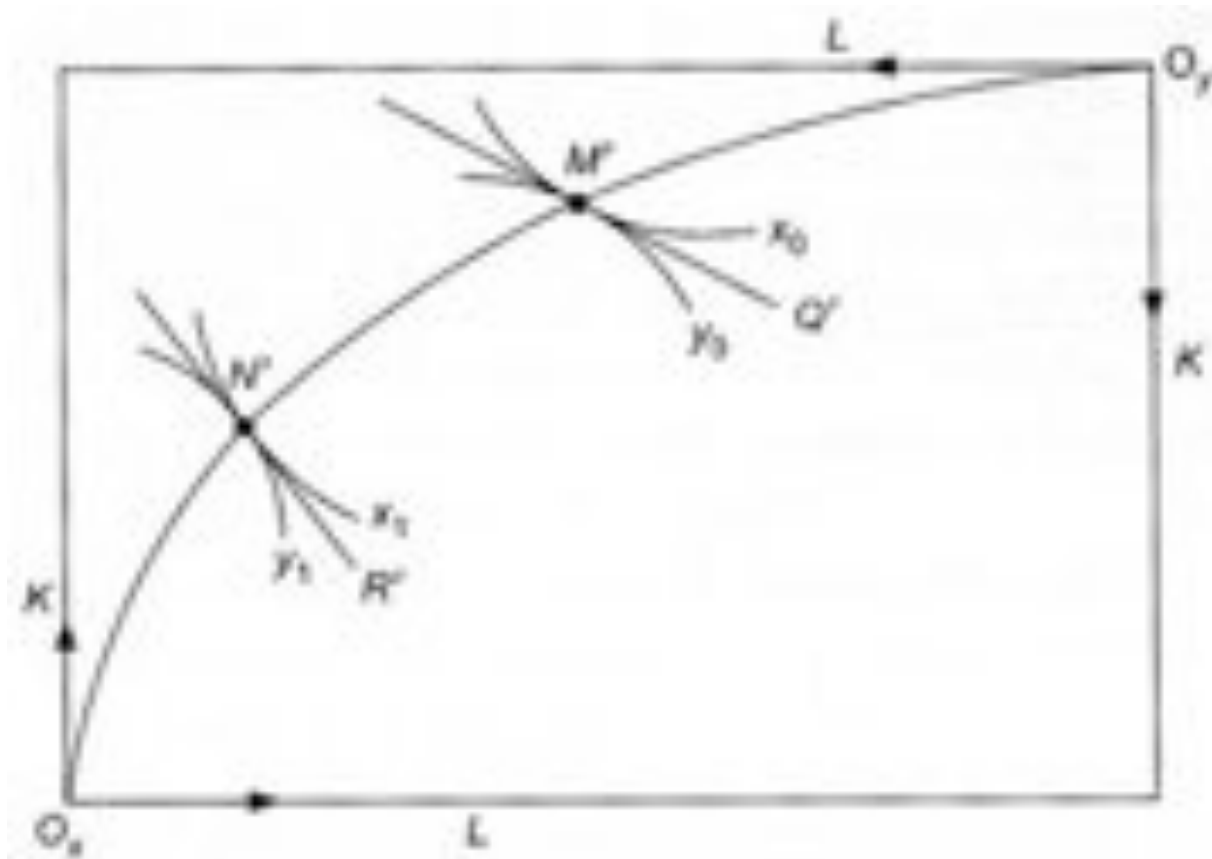


# The Stolper-Samuelson Theorem

The real income of a factor **increases** (decreases) if the level of output of the good which uses that factor relatively intensively (less intensively) **increases**



If relative price of good Y decreases, then X production increases and Y production decreases (from N to M)



When  $P$  goes down, more of  $X$  is produced while  $Y$  production diminishes.  
 In the two sectors both  $K/L$  and  $W/r$  ratios decrease

Because of a lower  $W/r$ , labour intensity increases and marginal productivity of labour decreases both in  $X$  and  $Y$  sector. Since  $MPP=W/P$ , real wage diminishes both in terms of  $X$  and  $Y$

On the other side, marginal productivity of capital improves in X and Y industry. Therefore, since

$$r/P = MPK$$

real rent for capital services increases