CONDITIONS OF EQUILIBRIUM OF THE FIRM AND INDUSTRY UNDER PERFECT COMPETITION

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MEANING OF FIRM AND INDUSTRY:

- IT IS ESSENTIAL TO KNOW THE MEANING OF FIRM AND INDUSTRY BEFORE ANALYSING THE TWO. FIRM IS AN ORGANISATION WHICH PRODUCES AND SUPPLIES GOODS THAT ARE DEMANDED BY THE PEOPLE WITH THE GOAL OF MAXIMISING ITS PROFITS.
- ACCORDING TO R.L.MILLER, "FIRM IS AN ORGANISATION THAT BUYS AND HIRES RESOURCES AND SELLS GOODS AND SERVICES." TO LIPSEY, "FIRM IS THE UNIT THAT EMPLOYS FACTORS OF PRODUCTION TO PRODUCE COMMODITIES THAT IT SELLS TO OTHER FIRMS, TO HOUSEHOLDS, OR TO THE GOVERNMENT."



• INDUSTRY IS A GROUP OF FIRMS PRODUCING
HOMOGENEOUS PRODUCTS IN A MARKET. ACCORDING TO
LIPSEY, "INDUSTRY IS A GROUP OF FIRMS THAT SELLS A
WELL-DEFINED PRODUCT OR CLOSELY RELATED SET OF
PRODUCTS." FOR EXAMPLE, RAYMOND, MAFFATLAL,
ARVIND, ETC., ARE CLOTH MANUFACTURING FIRMS,
WHEREAS A GROUP OF SUCH FIRMS IS CALLED THE
TEXTILE INDUSTRY.

CONDITIONS OF EQUILIBRIUM OF THE FIRM AND INDUSTRY:

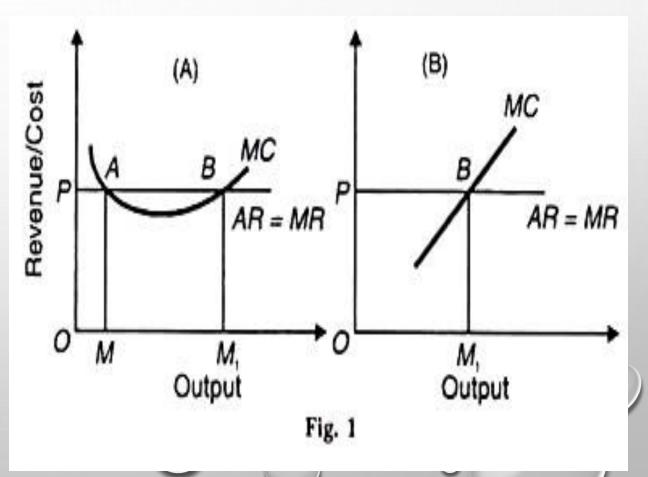
- A FIRM IS IN EQUILIBRIUM WHEN IT HAS NO TENDENCY TO CHANGE ITS LEVEL OF OUTPUT.
- IT NEEDS NEITHER EXPANSION NOR CONTRACTION.
- IT WANTS TO EARN MAXIMUM PROFITS IN BY EQUATING ITS MARGINAL COST WITH ITS MARGINAL REVENUE, I.E. MC = MR.

DIAGRAMMATICALLY, THE CONDITIONS OF EQUILIBRIUM OF THE FIRM ARE:

- (1) THE MC CURVE MUST EQUAL THE MR CURVE. THIS IS THE FIRST ORDER AND NECESSARY CONDITION. BUT THIS IS NOT A SUFFICIENT CONDITION WHICH MAY BE FULFILLED YET THE FIRM MAY NOT BE IN EQUILIBRIUM.
- (2) THE MC CURVE MUST CUT THE MR CURVE FROM BELOW AND AFTER THE POINT OF EQUILIBRIUM IT MUST BE ABOVE THE MR. THIS IS THE SECOND ORDER CONDITION.' UNDER CONDITIONS OF PERFECT COMPETITION, THE MR CURVE OF A FIRM COINCIDES WITH THE AR CURVE. THE MR CURVE IS HORIZONTAL TO THE X- AXIS. THEREFORE, THE FIRM IS IN EQUILIBRIUM WHEN MC=MR=AR (PRICE).



In Figure 1(A), the MC curve cuts the MR curve first at point A. It satisfies the condition of MC = MR, but it is not a point of maximum profits because after point A, the MC curve is below the MR curve. It does not pay the firm to produce the minimum output OM when it can earn larger profits by producing beyond OM.





- POINT B IS OF MAXIMUM PROFITS WHERE BOTH THE CONDITIONS ARE SATISFIED. BETWEEN POINTS A AND B. IT PAYS THE FIRM TO EXPAND ITS OUTPUT BECAUSE IT'S MR > MC. IT WILL, HOWEVER, STOP FURTHER PRODUCTION WHEN IT REACHES THE OM, LEVEL OF OUTPUT WHERE THE FIRM SATISFIES BOTH THE CONDITIONS OF EQUILIBRIUM.
- IF IT HAS ANY PLANS TO PRODUCE MORE THAN OM, IT WILL BE INCURRING LOSSES, FOR ITS MARGINAL COST EXCEEDS ITS MARGINAL REVENUE BEYOND THE EQUILIBRIUM POINT B. THE SAME CONCLUSIONS HOLD GOOD IN THE CASE OF A STRAIGHT LINE MC CURVE AS SHOWN IN FIGURE 1. (B)

AN INDUSTRY IS IN EQUILIBRIUM:

- FIRSTLY WHEN THERE IS NO TENDENCY FOR THE FIRMS EITHER TO LEAVE OR ENTER THE INDUSTRY, AND SECONDLY, WHEN EACH FIRM IS ALSO IN EQUILIBRIUM. THE FIRST CONDITION IMPLIES THAT THE AVERAGE COST CURVES COINCIDE WITH THE AVERAGE REVENUE CURVES OF ALL THE FIRMS IN THE INDUSTRY. THEY ARE EARNING ONLY NORMAL PROFITS, WHICH ARE SUPPOSED TO BE INCLUDED IN THE AVERAGE COST CURVES OF THE FIRMS.
- THE SECOND CONDITION IMPLIES THE EQUALITY OF MC AND MR.
 UNDER A PERFECTLY COMPETITIVE INDUSTRY THESE TWO
 CONDITIONS MUST BE SATISFIED AT THE POINT OF EQUILIBRIUM, I.E.
- $MC = MR \dots (1)$
- $AC = AR \dots (2)$



- AR = MR
- MC = AC = AR
- SUCH A SITUATION REPRESENTS FULL EQUILIBRIUM OF THE INDUSTRY.