

Topic : Why a perfectly competitive firm continues production in the short run even if it incurs losses.

Hi everyone. Today, I'm going to talk about perfectly competitive firms in the short run in the sense of why they choose to continue the production even when they have negative profit, but before we get to that let's recap on the characteristics or assumptions of the perfect competitive market.

First assumption, the goods within the market are indifferent. Secondly, there's no barrier for firms to either enter or exit the market. Third, there are many buyers and many sellers that are active in the market.

Next is that the firms are price taker meaning they sell at the equilibrium price that is determined in the market. Finally, total cost is the addition of total fixed cost and total variable cost as shown in the diagram. There, the average cost curves can be derived and used to analyze and determine the profit maximizing output as well as shutdown point, in which will later be used again to quantitatively compare and explain the losses showing why firms decide to continue to produce when they actually lose money.

Now, let's get back to the question which Herb will take it from here.

Why a perfectly competitive firm can continue production in the short run even if incurs losses because firms should shut down if profit when shut down more than profit when continue producing. Or you can say that firms should shut down when variable cost more than total revenue. I will show 3 cases that can occur when it does not gain any profit and incurs losses in a perfectly competitive firm.

First case, firm A has total revenue 100 baht, total cost 200 baht, fixed cost 120 baht and variable cost 80 baht, it shows that firm A can support all variable cost that it has, so firm A should not shutdown because it lost 100 baht. In contrast, if firm A shutdowns, firm does not have any revenue and loses 120 baht because firm must still pay for fixed cost.

Second case, firm B has total revenue 100 baht, total cost 200 baht with fixed cost 100 baht and variable cost 100 baht, it demonstrates that firm B can support all variable cost, but cannot support any fixed cost. So, should this firm shutdown or not? The answer is that the firm should continue the production even though the profit when the firm shuts down and when the firm continues are the same, the firms should keep appearing in the market to maintain the relationship with both customers and suppliers. In general, it's because firm B has the opportunity to gain more revenue and reduce cost in the long run if it does not stop the production.

Third case, firm C has total revenue 100 bath, total cost 200 baht, fixed cost 80 baht and variable cost 120 baht, it indicates that firm C cannot encourage all variable cost, hence, this firm should shut down because firm C faces more loss when continuing production more than the loss when shutdown. I will show why? If firm C continues production, it will lose 100 baht from fixed cost 80 baht and variable cost 20 baht while if firm C shutdown, it will only lose 80 baht from only fixed cost.

To conclude, In the short run, the firm has already committed to pay its fixed costs. If the firm produces a quantity of zero, it would still make losses because it still needs to pay for its fixed costs. We cannot eliminate fixed costs if the firm still runs the business. Hence, the firm will continue their business if the firm has the total revenue greater than the fixed cost even if the firm incurs losses. Or you can see in the diagram, in the first zone above the break even point where the average revenue is greater than the average costs. Next, the second zone between break even point and shutdown point, the firm incurs loss but they will continue operating in the short run because of other related beneficial factors. This is where we mentioned about. And The third or last zone under the shutdown point is where the firm should shutdown. That's all of our presentation, thank you.

Video link: <https://drive.google.com/file/d/1eIRu-FB1wVwjIRG6dfs8HbKijHV1CiSq/view?usp=drivesdk>

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