

Marginal analysis

Literature, Russian Literature



ESSAY MARGINAL ANALYSIS MACRO & MICRO ECONOMICS OCTOBER 31, w
are s from the grader of the paper. Please revise in a different COLOR to
incorporate the revisions.

1. A. The response provides an incomplete explanation of the relationship of
marginal revenue and total revenue. Please revise with a more specific
explanation. Please revise to include a clear and direct relationship between
marginal revenue and total revenue.

F. 1. The essay does not clearly explain what a firm would do with respect to
output decisions if marginal revenue is less than marginal cost. Please revise
to address whether the firm should increase or decrease production.

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marginal cost. ⁵

G. References ⁶

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MARGINAL ANALYSIS

Marginal analysis is a tool used by business in comparing changes in benefits and costs. It helps firms to make decisions on maximizing its production to arrive at a profit

A. Marginal revenue definition and its relationship to revenue

Definition. Marginal revenue is defined as the additional revenue obtained from selling one more unit of the good that he produces (William Boyes and Melvin, Michael, 2002, p. 202-205). To better understand it, let us present it in the form of a graph.(see graph I)

Revenue is the blue area under the demand curve

Graph 1 \$10

100 Q

We have here a demand graph showing the quantity of a certain item the consumers are willing to buy at a certain price. At price of \$10, people are willing to buy 100 pcs. Total revenue \$1000 It is blue area under the demand curve. People will not buy more if the price is increased, and in order to sell more, price must be dropped.

It is important to be aware of the demand curve to understand the marginal

revenue because it will show how much the producer needs to lower the price in order to sell another item. Demand curve is the slope going down (D)

Marginal revenue is graphically shown in graph 2

P

Graph 2

source: Beggs, Jodi

Marginal Revenue is calculated as $MR = \text{Change in Revenue} / \text{Change in Quantity}$ (Beggs. Jodi)

The relationship that exists between the two is the additional revenue that is given by producing another unit of production. It can further be related as the unit revenue the last item has sold, or how much is the contribution to revenue of the last item sold. The causal relationship that exist is for each item sold, $\text{marginal profit} = \text{marginal revenue} - \text{marginal cost}$. And if MR IS greater than MC at a certain point of output, then profit is positive; and the same relationship exists when MR is less than MC result is negative.

B. Marginal cost and its relationship with total cost

Definition. Marginal cost is defined as the additional cost of producing one more unit of the output (Investopedia. n. d.) Accordingly, the purpose of analyzing marginal cost is to find out the point where the company can realize economies of scale.

Relationship. The relationship is described as change in total cost that comes from making one additional item. Analyzing marginal cost is important because it will decide at what point the manufacturer can determine the “

optimum production level”. When the production of one more unit costs more than the revenue obtained from the sale of the unit, then producing that unit will decrease the profit. As a rule, “ when marginal revenue is greater than marginal cost, then producing more will increase profit. On the other hand, when marginal revenue is less than the marginal cost, producing more will reduce profit”(Boyes and Melvin, p. 204).

Its relationship to total cost of production can be explained by computing how much will the total cost becomes when one more unit is produced and knowing ahead the profit or loss business will get in producing additional unit. Conversely, it can be described as to how much cost is added to the total production cost by the additional product.

PROFIT AND THE CONCEPT OF MAXIMIZATION

Definition. Profit is the difference between total revenue and total cost (TR – TC). Profit is the ultimate goal of any business as this satisfies criteria of any investment.

The concept of maximization is the method a company uses to go through to find out the best output and price levels that will result to a maximum return. In going through the process, company may adjust production costs, prices, and output level to reach its profit goal. Two methods that could be used in the process are the Marginal cost – marginal revenue and the Total cost – total revenue method (Investorwords). A firm maximizes its profit by finding the quantity where equals the marginal cost ($MR = MC$) and then sets the price according to the consumers’ demand.

D. How a profit-maximizing firm determines its optimal level of output, using marginal revenue and marginal cost as criteria.

In order to determine a firm's optimal level of output which is $MR = MC$, the firm must supplement its data about market demand and prices with data on cost of production at different levels. Let us consider this table:

(1)

Total output

Q

(2)

Total revenue

(3)

Total Cost

(4)

Marginal Revenue

(5)

Marginal Cost

(16)

Profit

(TR-TC)

0

0

\$1, 000

-

-

-\$1, 000. 00

1

1, 700

2, 000

1, 700

1, 000

-300. 00

2

3, 300

2, 800

1, 600

800

500. 00

3

4, 800

3, 500

1, 500

700

1, 300. 00

4

6, 200

4, 000

1, 400

500

2, 200. 00

5

7, 500

4, 500

1, 300

500

3, 000. 00

6

8, 700

5, 200

1, 200

700

3, 500. 00

7

9, 800

6, 000

1, 100

800

3, 800. 00

8

10, 800

7, 000

1, 000

1, 000

3, 800. 00

9

11, 700

9, 000

900

2, 000

2, 700. 00

*Hypothetical example only.

The first column is the total quantity of gowns produced, column 2 comes from selling each quantity, and column 3 is the total cost of producing each quantity. Col 4, Marginal Revenue is the change in total revenue that comes with the production of the additional gown. The marginal revenue of the first gown produced is the change in revenue that the firm gets in increasing its production and sales from zero to 1 unit which is listed in the row of gown no. 1. The marginal revenue of the second gown produced is the change in revenue that the firm receives for increasing its production and sales from 1 to 2 gowns. The first gown takes \$2000 to produce, the marginal cost of the first gown is \$1, 000. When sold it will give a revenue of 1, 700 . Since marginal revenue is greater than marginal cost, the firm is better off producing that first gown rather not producing it.

As the firm continues production, profit continues to rise until the 8th gown is produced wherein the marginal cost and marginal revenue is equal. Profit declines upon producing the 9th gown. So the firm maximizes its profit by producing 8 gowns, the quantity wherein MR and MC are equal.

E. What Action a profit-maximizing firm takes if marginal revenue is greater than marginal cost.

When the marginal revenue is greater than marginal cost, the best thing that a profit-maximizing should do is to produce more products until the last items produced reach the break even level. This means that the firm has reached the maximum level of production and profit.

F. Action a profit-maximizing firm takes if marginal revenue is less than marginal cost.

When a firm is operating on a condition where its marginal revenue is less than marginal cost, profit is negative, so company should decrease production, or lesser quantity should be produced. Ways of reducing costs is to check on its variable costs where expenses may be high such as administrative and selling, bring it down, and make adjustments on the output level until it reaches the break-even point.

References

Beggs, Jodi. The Marginal Revenue and Demand curve. About. com.

Economics. Retrieved 30 October 2012 [http://economics. about.](http://economics.about.com/od/production/ss/Marginal-Revenue-And-The-Demand-Curve.htm)

[com/od/production/ss/Marginal-Revenue-And-The-Demand-Curve. htm](http://economics.about.com/od/production/ss/Marginal-Revenue-And-The-Demand-Curve.htm)

Investopedia. Definition. Marginal cost of production.

[http://www. investopedia. com/terms/m/marginalcostofproduction.](http://www.investopedia.com/terms/m/marginalcostofproduction.asp#axzz2AgOdQLyw)

[asp#axzz2AgOdQLyw](http://www.investopedia.com/terms/m/marginalcostofproduction.asp#axzz2AgOdQLyw)

Boyes, William and Melvin, Michael. Marginal Revenue and Marginal Cost.

Macro

Economics, Houghton Mifflin Company, Boston, New York, 2002, p. 202- 205