Opportunity Cost

by Sophia

WHAT'S COVERED

This tutorial will define opportunity costs and explain how they are used in assessing in investor returns or business profits.

Our discussion breaks down as follows:

1. Opportunity Cost
2. Accounting Profit vs. Economic Profit

1. Opportunity Cost

Let's begin by getting in the mindset of a business or investor.

The point of owning a business or being an investor is to make a profit, which, for a business, is simply revenues or sales minus costs.

Profit = **Revenues - Costs**

Now, firms have to make strategic decisions all the time, such as what to produce, which technology to use, whether to hire more labor, etc.

Whatever their decision, they are sacrificing something else.

EXAMPLE For example, suppose a firm has to make a decision about producing Product A or Product B. If they decide to focus their attention on Product A, they are sacrificing the ability to produce Product B, as well as sacrificing the potential returns that Product B could have given them.

Similarly, if they choose one technology over another, they are giving up the ability to implement that other, next best technology.

Investors also make decisions. When investing, they are looking at which company will yield a better return.

They need to evaluate whether a potential investment is safe versus risky.

THINK ABOUT IT

When it comes to investing, are you safe or risky? Would you rather keep your money in the bank or in a low interest bond, or would you invest it in a risky business venture that could potentially yield a high return? If you opt for the risky business venture, you are sacrificing the safe return you could have made on the bond. Therefore, whatever their decision, investors are also sacrificing the return that could have been made on the other option.

Opportunity costs are the sacrifices made by choosing one value or opportunity over another.

This concept is important in economics because opportunity costs help us decide whether we made a good decision or not.

TERM TO KNOW

Opportunity Cost

The sacrifice made by choosing one value or opportunity over another

2. Accounting Profit vs. Economic Profit

Accounting profit is rather straightforward: total revenue minus total cost.

Total revenue--abbreviated TR--is the price of the product times the quantity sold.

Total cost is the cost per unit times the quantity. Note that the cost per unit here represents explicit, out-of-pocket costs only.

FORMULA TO KNOW

Accounting Profit

$$Profit = TR - TC$$

$$where:$$

$$TR = price \times quantity\ sold$$

$$TC = cost\ per\ unit \times quantity\ produced$$

In economics, we take this a step further, stating that economic profit is our total revenue minus *all* of our costs, which would also include opportunity costs.

FORMULA TO KNOW

Economic Profit

$$Profit = TR - TC$$

$$where:$$

$$TC = all\ costs\ including\ opportunity\ costs$$

In the economic profit formula, total costs doesn't simply include things like paying your employees or purchasing your raw materials. It also includes what you are sacrificing or giving up.

> EXAMPLE For example, if you did take your money out of a safe investment and put it into a more risky investment, you are giving up the return that the initial invested amount could be earning. Or, if you quit your job to start a business, an economist would say that you need to measure the salary that you are giving up in order to start the new business.

These things are not included in a straightforward accounting profit, but they are very much considered in economic profit, because they represent opportunity costs.

SUMMARY

Today we learned that firms and investors make strategic decisions which always include an **opportunity cost**, or the sacrifice made by choosing one value or opportunity over another. We compared **accounting profit vs. economic profit**, noting that economists consider *all* costs--including opportunity costs--when evaluating the profitability of a decision.

Source: Adapted from Sophia instructor Kate Eskra.

TERMS TO KNOW

Opportunity Cost
The sacrifice made by choosing one value or opportunity over another.