Explicit and implicit costs and accounting and economic profit

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Key points

- Privately owned firms are motivated to earn profits. Profit is the difference between revenues and costs.
- **Private enterprise** is the ownership of businesses by private individuals.
- **Production** is the process of combining inputs to produce outputs, ideally of a value greater than the value of the inputs.
- **Revenue** is income from selling a firm's product; defined as price times quantity sold.
- **Accounting profit** is the total revenues minus explicit costs, including depreciation.
- **Economic profit** is total revenues minus total costs—explicit plus implicit costs.
- **Explicit costs** are out-of-pocket costs for a firm—for example, payments for wages and salaries, rent, or materials.
- **Implicit costs** are the opportunity cost of resources already owned by the firm and used in business—for example, expanding a factory onto land already owned.

Explicit and implicit costs and accounting and economic Profit

Private enterprise—the ownership of businesses by private individuals—is a hallmark of the US economy. When people think of businesses, often giants like Wal-Mart, Microsoft, or General Motors come to mind. But firms come in all sizes, as you can see in the table below.

The vast majority of US firms have fewer than 20 employees. As of 2010, the US Census Bureau counted 5.7 million firms with employees in the US economy. Slightly less than half of all the workers in private firms are at the 17,000 large firms, firms that employ more than 500 workers. Another 35% of workers in the US economy are at firms with fewer than 100 workers.

These small-scale businesses include everything from dentists and lawyers to businesses that mow lawns or clean houses. There are also millions of small, non-employer businesses where a single owner or a few partners are not officially paid wages or a salary but simply receive whatever they can earn—there is not a separate category in the table for these businesses.

Range in size of US firms

Number of employees	Firms, % of total firms	Number of paid employees, % of total employment
Total	5,734,538	112.0 million
0–9	4,543,315, 79.2%	12.3 million, 11.0%
10–19	617,089, 10.8%	8.3 million, 7.4%
20–99	475,125, 8.3%	18.6 million, 16.6%
100–499	81,773, 1.4%	15.9 million, 14.2%
500 or more	17,236, 0.30%	50.9 million, 49.8%

Source: 2010 US Census, www.census.gov

Each of these businesses, regardless of size or complexity, tries to earn a profit.

$$\text{Profit} = \text{Total revenue} - \text{Total cost}$$

Total revenue is the income brought into a firm from selling its products. It is calculated by multiplying the price of the product times the quantity of output sold:

$$\text{Total revenue} = \text{Price} \times \text{Quantity}$$

We can distinguish between two types of cost: explicit and implicit. *Explicit costs* are out-of-pocket costs—payments that are actually made. Wages that a firm pays its employees or rent that a firm pays for its office are explicit costs.

Implicit costs are more subtle but just as important. They represent the opportunity cost of using resources already owned by the firm. Often for small businesses, they are resources contributed by the owners—for example, working in the business while not getting a formal salary or using the ground floor of a home as a retail store. Implicit costs also allow for depreciation of goods, materials, and equipment that are necessary for a company to operate.
These two definitions of cost are important for distinguishing between two conceptions of profit—accounting profit and economic profit. *Accounting profit* is a cash concept. It means total revenue minus explicit costs—the difference between dollars brought in and dollars paid out. *Economic profit* is total revenue minus total cost, which includes both explicit and implicit costs.
The difference is important. Even though a business pays income taxes based on its accounting profit, whether or not it is economically successful depends on its economic profit.

Calculating implicit costs

Let's take a look at an example in order to understand better how to calculate implicit costs.
Fred currently works for a corporate law firm. He is considering opening his own legal practice, where he expects to earn $200,000 per year once he gets established. To run his own firm, he would need an office and a law clerk. He has found the perfect office, which rents for $50,000 per year. A law clerk could be hired for $35,000 per year. If these figures are accurate, would Fred's legal practice be profitable?
Step 1. First we'll calculate the costs. We'll use what we know about explicit costs:
Explicit costs=Office rental−Law clerk's salary
Explicit costs=$50,000−$35,000
Explicit costs=$85,000
Step 2. Subtracting the explicit costs from the revenue gives you the accounting profit.
Accounting profit=Revenues−Explicit costs
Accounting profit=$200,000−$85,000
Accounting profit=$115,000
But these calculations consider only the explicit costs. To open his own practice, Fred would have to quit his current job, where he is earning an annual salary of $125,000. This would be an implicit cost of opening his own firm.
Step 3. You need to subtract both the explicit and implicit costs to determine the true economic profit:
Economic profit=Total revenues−Explicit costs−Implicit costs
Economic profit=$200,000−$85,000−$125,000
Economic profit=−$10,000
Fred would be losing $10,000 per year. That does not mean he would not want to open his own business, but it does mean he would be earning $10,000 less than if he worked for the corporate firm.
Implicit costs can include other things as well. Maybe Fred values his leisure time, and starting his own firm would require him to put in more hours than at the corporate firm. In this case, the lost leisure would also be an implicit cost that would subtract from economic profits.

Summary

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Self-check questions

A firm had sales revenue of $1 million last year. It spent $600,000 on labor, $150,000 on capital, and $200,000 on materials. What was the firm's accounting profit?
[Show solution.]
Accounting profit=Total revenues−Explicit costs
Accounting profit=$1,000,000−($600,000+$150,000+$200,000)
Accounting profit=$50,000

Review questions

- What are explicit and implicit costs?
- Would an interest payment on a loan to a firm be considered an explicit or implicit cost?
- What is the difference between accounting and economic profit?

Critical-thinking question

Small mom-and-pop firms sometimes exist even though they do not earn economic profits. How can you explain this?

Problem

A firm is considering an investment that will earn a 6% rate of return. If it were to borrow the money, it would have to pay 8% interest on the loan. The firm currently has the cash, though, so it will not need to borrow. Should the firm make the investment? Explain.
[Hide attribution and references.]

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References

2010 US Census. www.census.gov.