

A Comprehensive Overview: Concepts of Cost and Its Functions

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ABSTRACT:

Cost ideas and their associated functions are essential to understanding economics because they offer important insights into resource allocation, pricing tactics, and firm profitability. The basic ideas surrounding cost and its roles in economics are examined in this chapter. In economics, the term cost refers to the value or hardship associated with the production or acquisition of commodities and services. Both explicit costs, which are quantifiable out-of-pocket charges, and implicit costs, which are the opportunity costs of other resource uses, are included in it. Total cost is the sum of all costs, both explicit and implicit, both fixed and variable costs included.

KEYWORDS:

Average Cost, Cost Production, Explicitly Costs, Fixed Costs, Implicit Costs.

I. INTRODUCTION

In the context of microeconomic theory, the idea of cost is extremely important. An entrepreneur whose primary goal is to maximize profit makes manufacturing decisions based on the cost of production. Profit margin increases when production costs decrease. The cost of production refers to the costs associated with both factor and non-factor manufacturing inputs. Factor inputs, often known as factors of production, include land, labor, capital, and organization. Tools, equipment, fuel, and other non-factor inputs include raw materials. Cost, then, depends on a number of variables. Where C represents the overall cost of production, Q represents the output, T represents technology, and P_f represents the cost of production factors. The following provides explanations of some key production cost ideas. Nominal Cost vs. Real Cost the payments provided to production factors in exchange for their labor and other expenses are referred to as real costs. Real cost is calculated based on labor's suffering and sacrifices. It also includes the price of waiting. The nominal cost of a product is the financial cost expenses associated with the various production inputs [1], [2].

The paid-out costs are the explicit costs. These are the sums paid for the firm's acquisition or employment of productive resources. These include labor wages, building rent, payments for raw materials, payments deposited into depreciation accounts, and premiums for insurance against fire and theft, among other things. Explicit costs are the cash payments that businesses make to third parties in exchange for their services and commodities, according to Left witch. These expenses are recorded in the company's accounting records. Contrarily, implicit costs of production are the expenses related to resources that are owned and used by independent contractors. Normally, these expenditures are not taken into account when estimating a producer's costs. These include the compensation for the entrepreneur's own work, capital, and land. These expenses are not listed in the company's accounting records. The entire cost of producing a good or service is the sum of its explicit and hidden expenses. Possibility, Alternate, and Transfer Cost The most significant idea in economic theory is opportunity cost. The cost of the next best alternative given up in order to make a decision is the simplest definition of opportunity cost. The value of the best alternative or chance passed up is the opportunity cost of employing resources to produce a thing. Both explicit and implicit expenses are included in opportunity costs.

For instance, suppose a producer has the option of making a radio set or a bicycle with the sum of Rs. 2000. In this instance, the opportunity cost of a radio equals the price of the bicycle he gave up. Social, external, and private costs an external expense is one that is not borne by the company but rather by members of society. All expenses, regardless of who pays for them, must be included in the total cost to society. Private costs are the expenses incurred by a company when providing a good or service. It is actually the business's financial expenses. A car's purchasing price, for instance, accounts for the manufacturer's personal expenses. However, the air pollution generated during the car's production has an external cost. These expenses are referred to as external to the market pricing process because neither the manufacturer nor the car's price cover them. Another externality related to driving a car is air pollution. The cost of the environmental harm that a car's use results in is not covered by the driver. The sum of all the expenses related to an economic activity is known as the social cost. It comprises all costs incurred by society as a whole as well as costs borne by the economic agent[3], [4].

It covers both the expenses external to the firm's private costs and the costs represented in the production function of the organization referred to as private costs or external costs. In other words, it is the price that society as a whole pay to produce a good. The total of private and external costs is hence the social cost. Consequently, Social Cost is equal to Private Cost-plus External Cost or External Cost is equal to Social Cost minus Private Cost. A negative externality exists when social costs outweigh private expenses. A social cost that is rarely fully paid by the polluter, such as environmental contamination, results in a negative externality. A positive externality exists if private costs are higher than social costs. When a provider of educational services only gets paid for the direct advantage that the recipient of the education receives, they are only providing an indirect benefit to society as a whole. This is an example of a positive externality. Economists refer to this as market failure in either scenario since resources will be distributed inefficiently. Economic costs are the sums of money that resource owners must be paid in order for them to keep providing their resources for use in production. Normal profit is included in economic cost.

Costs in the Short Run and The Long Run

The term short run refers to a time frame within which a company can alter its output by just altering the number of variable components, such as lab our, raw materials, etc. Fixed elements like land, machinery, etc., cannot be modified in a short period of time. Short run costs are manufacturing expenses incurred in the short run, or on movable factors. The expenditures incurred over a time in which all variables are modifiable are the long-term costs. Expenses of production are therefore long-term expenses since all elements become variable over time[5]–[7].

II. DISCUSSION

Variable Prime Costs and Supplementary Costs

While expenses incurred on variables may be referred to as variable costs, those incurred on fixed components are referred to as fixed costs.

1. Administrative staff salaries and other costs.
2. Production staff salaries on a fixed-term basis.
3. Machinery wear and tear standard depreciation allowances.
4. Building maintenance costs.
5. Land maintenance costs.
6. Normal profit, which is a lump sum that includes a percentage r ; are all considered fixed costs.

Cost

1. Direct lab our, which fluctuates with output, is one of the variable costs.
2. Raw materials;
3. Machinery operating costs.

The entire cost of production is made up of fixed and variable costs added together. TC is denoted symbolically as $TC = TFC + TVC$ Total Fixed Cost TFC Total fixed cost is the total cost for inputs that remain constant over a range of output levels. In Fig. 8.1, the whole fixed cost is represented graphically. It runs directly down the x-axis or output. The total fixed cost TFC curve is parallel to the x-axis, showing that it is constant at all production levels.

Marginal Cost and Average Cost in Relation

Total costs are divided by output units to determine average cost. The difference in total costs brought on by an increase in output per unit is known as the marginal cost. The following describes the connections between the two:

1. Marginal cost is lower than average cost before point P when average cost declines with an increase in output.
2. The marginal cost is higher than the average cost when the average cost increases see point P.
3. The marginal cost curve intersects the average cost curve at its lowest point, which also happens to be the point of maximum capacity, or point P. At this point, $MC = AC$.

Value Indication - The Concept of Cost

You must assign a price to it this expression is typical and occasionally used as a broad dialect. What does that signify, then? It signifies assigning worth to something. Therefore, the price is nothing more than the value that is paid to use the commodity or service. The idea of cost provides a hint as to the total amount of resources needed to obtain the same. Thus, without further ado, let's begin exploring the concept of cost, which is another crucial idea in the study of business[8]–[10].

Cost Accounting Concept of Cost

A crucial idea in economics is the concept of cost. It speaks of the sum paid in order to obtain any goods or services. Cost can be defined as a financial evaluation of the assets, inputs, risks, time, and expenses required to purchase goods and services. The cost of producing any goods or services is frequently referred to as the concept of opportunity cost from the perspective of an economist. Today's world is more competitive than ever, so businesses are under pressure to maximize earnings. The choice made by the corporation to maximize profits depends on how its costs and revenues behave. There are various different cost notions in addition to the idea of opportunity cost, including fixed costs, explicit costs, social costs, implicit costs, social costs, and replacement costs. There are therefore many distinct kinds of cost notions, some of which have been addressed here.

Cost Concept Types

The concept of opportunity cost states that the cost of one thing is the opportunity cost of not doing something else. For instance, by getting married to someone, one might miss out on the chance to be married to someone else, or by spending more money on video games, one might miss out on the chance to watch movies. Classifying the costs makes it simple to understand the concept of cost. Costs are categorized based on commonalities or shared qualities. To discuss the costs of cost centers, a clear classification of costs is certainly necessary. The many cost concepts include:

1. Costs of investment and lost opportunities.
2. Economic costs and accounting expenses.
3. Direct costs that can be tracked and indirect costs that are not.
4. Sunk expenses and incremental costs.
5. Both personal and societal costs.
6. Variable costs versus fixed costs
7. According to the Type of Expenses.

The two sorts of cost, according to nature, are as follows:

1. Outlay expenses are the actual costs incurred by an entrepreneur when using input.

2. It covers expenses for paying for fuel, rent, electricity, and other things.
3. Opportunity Cost Theory
4. Every time you make a choice, you forfeit the worth of the next greatest thing.
5. Traceability-Based Classification
6. According to traceability, the costs come in the following forms:
7. Explicit Costs
8. A cost that is connected to the process of producing a good or service is referred to as a direct cost. It is the direct cost's opposite.
9. These expenses are associated with a specific good or method. As they could be linked to a particular action, they are sometimes referred to as traceable costs. It is the direct cost's opposite.

Indirect Expenses

Costs that cannot be directly linked to a specific cost object or cost source are known as indirect costs. Other names for them are untraceable costs. However, they are crucial since they have an impact on overall profitability. The Idea of Costs in Relation to Accounting Costs Direct costs include accounting charges. They go by the name hard costs as well. For the direct purchase of resources needed for production, the entrepreneur must pay cash. It covers expenses such as the price of the equipment and raw supplies, electricity costs, etc. These expenses are regarded as costs.

Financial Costs

The sum of the products' gains and losses is the economic cost. Economists typically compare one another using this cost. Classification based on the Incremental Cost for the Purpose The adjustments to future costs that will take place as a result of a choice are known as incremental costs. Sunk costs are expenses that are lost after being incurred. It comprises the sums spent on advertising and market research. Variability based on Payers and Types of Cost Concept based on Players Private cost refers to the expenses incurred when a person creates or consumes something. A businessperson invests in his or her own personal or professional interests. The social cost is the price a news event or policy change imposes on a society as a whole.

Regarding Variability

The concept implies that fixed expenses remain constant regardless of output volume. These expenses never change, regardless of how many services or products are supplied or sold. Simply put, a variable cost is one that changes depending on how the result turns out. Lower manufacturing costs result in lower costs, while higher production costs result in higher costs. The business will pay more if the production is more, and vice versa.

Costs Concept

It's crucial to grasp the many forms of expenses in order to comprehend the concept of costs in general:

1. Economic costs and accounting expenses.
2. Costs of investment and lost opportunities.
3. Direct costs that can be tracked and indirect costs that are not.
4. Sunk expenses and incremental costs.
5. Costs to the individual and society.
6. Costs are fixed under the concept of treatment.

1. Cost Accounting

Accounting costs are those that the business owner directly spends in cash to get materials needed for production. These expenses include the price of raw materials and equipment, worker wages, power prices, the cost of renting or buying a building or site, etc. Expenses are handled as accounting costs. They are reported in financial statements by chartered accountants.

2. Financial Expenses

Certain expenses are disregarded by accounting expenses. These include the funds that the business owner forgoes but would have made if he had put his time, effort, and money into other endeavors. For instance, the business owner would have made money if he had offered his services to others rather than focused on his own company. Other examples of economic costs include potential returns on the capital he used for his business rather than donating it to others, the output produced by his resources that he could have utilised to help others, etc. Economic costs assist the entrepreneur in calculating supernormal earnings, or the extra money he would make from investing in businesses other than his own. Understanding of costs in relation to the types of expenses:

1. Expenditures

Outlay costs are the actual costs that the entrepreneur incurs when using inputs. Costs for paying labour, rent, power or fuel bills, raw materials, etc. are some examples. They must be handled as general business expenses.

2. Opportunity Costs

Opportunity costs are earnings from the next best option that the entrepreneur forgoes when making specific decisions. For instance, if the entrepreneur had chosen to work for someone else rather than focus on his own company, he might have been paid. These expenses compute the lost opportunity and the revenue we could have generated by adopting a different course of action. Costs as they relate to tractability:

1. Direct Expenses

Direct costs are associated with a particular procedure or good. They are also known as traceable expenses because we can easily link them to a certain process, product, or activity. They can alter as the activity or product changes. Examples of direct costs include production-related manufacturing expenses, sales-related customer acquisition expenses, etc.

2. Direct Expenses

Untraceable expenses, also known as indirect costs, are those that are not directly related to a particular activity or area of the firm. For instance, a rise in the cost of power or the amount of income taxes due. Indirect costs are significant because they impact total profitability even though we cannot directly trace them.

Costs in the Context of their Use

1. Added Expenses

These expenses are incurred when the company decides on a policy. Examples of incremental costs include switching up the product line, acquiring new clients, and upgrading the machinery to boost output.

2. Sunk Expenses

Sunk costs are expenses that the business owner has already incurred and cannot now recover. These include funds used for research, advertising, and purchasing equipment.

Costs as Payers:

1. Individual costs

The business incurs these expenses in order to achieve its own goals. They are spent by business owners for both personal and professional reasons. For instance, the price of manufacture, sale, promotion, etc.

2. Social expenses

As the term implies, societal costs for individual interests and company expenses are borne by society. These include social resources like the atmosphere, water supplies, and environmental pollutants for which the company bears no costs.

Understanding Costs in Terms of Variation

1. Fixed Expenses

Costs that are fixed do not fluctuate based on output volume. They are incurred by the business regardless of production level. These include, for instance, paying rent, taxes, loan interest, etc.

2. Variable Expenses

These expenses will change based on the output that the company produces. Less output will result in lower costs, and vice versa, higher production will result in higher costs for the company. Variable costs include expenses for the payment of employees and the purchase of raw materials.

Examples of Costs with Solutions

Give arguments for your descriptions of the nature of the following costs. The price of advertising. This cost may include

1. Direct expense relative to sales.
2. Sunk costs that cannot be recovered.
3. Private expense money spent for personal purposes.
4. Variable cost will change based on output volume.
5. Earnings from employment this cost could be:
6. Economic cost the individual could have worked for his firm and made more money.
7. Opportunity cost again, for the same motive.
8. Rent for factory space paid.

Accounting expense amount paid for purchasing production facilities Cost directly related to manufacturing Cost of outlay money spent on obtaining access to input, such as a factory Private expenditure used for personal or business purposes Fixed costs which remain constant regardless of changes in production levels Expenses & Variable Expenses The term cost in economics refers to the value or hardship incurred in the production or acquisition of goods and services. It is a fundamental idea that is crucial to many economic theories, assessments, and decision-making procedures. When commodities and services are produced and used, corporations, people, and communities all incur costs. For setting pricing strategies, gauging corporate profitability, and analyzing resource allocation, it is crucial to comprehend the ideas of cost and its functions.

In Economics, Cost Is Connected to A Number of Essential Ideas and Activities

Explicit Costs: An organization's actual out-of-pocket costs experienced during the production process are referred to as explicit costs. They consist of expenses like salaries, raw supplies, rent, utilities, and other direct financial outlays. Financial statements may readily calculate and account for explicit costs.

Implicit Costs: The opportunity costs of employing resources in a specific way are known as implicit costs. They stand for the value of the opportunities that are lost when resources are put towards a particular activity. The return the owner's capital could have received if invested elsewhere, for instance, is the hidden cost of using owner's capital in a business.

Total Cost: Total cost is the total of all costs, both explicit and implicit, incurred during manufacturing. It stands for the total amount spent to generate a certain level of production. Total cost comprises both fixed costs and variable costs, or costs that change depending on the volume of production.

Marginal Cost: When producing an additional unit of product, there is an additional cost that must be paid. It is calculated by dividing the variation in the overall cost by the variation in the output. In order

to make the best production decisions and choose the output level that maximizes profitability, marginal cost is crucial.

Average Cost: Total Cost is divided by the volume of output produced to arrive at average cost. It stands for the price for each unit of output. The average cost is crucial for determining production efficiency and comparing costs for various output levels.

Scale Economies: When the average cost of production falls as output levels rises, this phenomenon is known as a scale economy. It is a theory that describes how specialization, better production efficiency, and spreading fixed costs across a bigger output can all reduce costs. Economies of scale result in lower costs and higher profitability.

Diseconomies of Scale: When the average cost of production rises as output levels rise, there is a diseconomy of scale. This may occur as a result of inefficiencies, coordination issues, or declining scale benefits. Diseconomies of scale could lead to increased expenses and lower profitability. The mathematical link between the cost of production and the variables that affect it, such as the volume of output, the cost of the inputs, and technology, is represented by cost functions. Cost functions aid in cost behaviour analysis, cost change prediction, and production decision optimization. Economists, companies, and policymakers can make well-informed choices about production levels, pricing schemes, resource allocation, and policy development by comprehending the ideas of cost and its functions. It enlightens economic analysis and decision-making across various sectors of the economy, assists in locating cost-saving opportunities, and offers insights into the effectiveness of manufacturing processes.

III. CONCLUSION

Cost concepts and their roles are fundamental economic concepts that provide insight into resource allocation, pricing tactics, and firm success. To make educated decisions and maximize economic outcomes, it is crucial for businesses, governments, and economists to comprehend these principles. Cost includes both explicit and implicit costs, which represent the real expenditures paid out and the lost opportunities from using resources in other ways, respectively. These expenditures are included in the total cost, which comprises both fixed and variable expenses. While average cost shows the cost per unit of output, marginal cost quantifies the extra expense associated with creating an additional unit of output. When production increases and average costs fall, economies of scale take place, resulting in cost savings and enhanced profitability. Diseconomies of scale, on the other hand, occur when average costs grow along with increased production, potentially harming firm profitability.

REFERENCES

- [1] K. Hansen, "Decision-making based on energy costs: Comparing levelized cost of energy and energy system costs", *Energy Strateg. Rev.*, 2019, doi: 10.1016/j.esr.2019.02.003.
- [2] P. Dadgostar, "Antimicrobial resistance: implications and costs", *Infection and Drug Resistance*. 2019. doi: 10.2147/IDR.S234610.
- [3] C. Mihalopoulos *et al.*, "The economic costs of loneliness: a review of cost-of-illness and economic evaluation studies", *Social Psychiatry and Psychiatric Epidemiology*. 2020. doi: 10.1007/s00127-019-01733-7.
- [4] B. González López-Valcárcel en L. Vallejo-Torres, "The costs of COVID-19 and the cost-effectiveness of testing", *Appl. Econ. Anal.*, 2020, doi: 10.1108/AEA-11-2020-0162.
- [5] W. Muttamba *et al.*, "Households experiencing catastrophic costs due to tuberculosis in Uganda: magnitude and cost drivers", *BMC Public Health*, 2020, doi: 10.1186/s12889-020-09524-5.
- [6] C. Petheram en T. A. McMahon, "Dams, dam costs and damnable cost overruns", *J. Hydrol. X*, 2019, doi: 10.1016/j.hydroa.2019.100026.
- [7] W. D. Nordhaus, "Revisiting the social cost of carbon", *Proc. Natl. Acad. Sci. U. S. A.*, 2017, doi:

10.1073/pnas.1609244114.

- [8] P. C. Oostlander, J. van Houcke, R. H. Wijffels, en M. J. Barbosa, “Microalgae production cost in aquaculture hatcheries”, *Aquaculture*, 2020, doi: 10.1016/j.aquaculture.2020.735310.
- [9] N. Argyres, J. T. Mahoney, en J. Nickerson, “Strategic responses to shocks: Comparative adjustment costs, transaction costs, and opportunity costs”, *Strateg. Manag. J.*, 2019, doi: 10.1002/smj.2984.
- [10] L. Trenouth, T. Colbourn, B. Fenn, S. Pietzsch, M. Myatt, en C. Puett, “The cost of preventing undernutrition: Cost, cost-efficiency and cost-effectiveness of three cash-based interventions on nutrition outcomes in Dadu, Pakistan”, *Health Policy Plan.*, 2018, doi: 10.1093/heapol/czy045.