

The Firm in Economics

In this part of the course we would like to be able to make some generalizations about how firms act. It may seem at first, however, that this would be nearly impossible when one realizes that firms vary tremendously in size, type of good or service produced and the conditions in the industry in which they must sell their product. For example, both General Motors Canada and a “chip wagon” selling fries at the beach are both firms. What could they possibly have in common? In fact, there are some basic things that all firms have in common.

WHAT DO FIRMS HAVE IN COMMON?

Basic Activities

- ① Hiring and buying of factors of production
(which are needed in)
- ② “Producing” goods or services
(which are used in)
- ③ Selling these goods at a price

Considerations in these Activities

- ① The distinction between the short-run and the long-run
- ② Economic Profit
- ③ Technical Efficiency

The distinction between the short-run and the long-run

We will first look at the distinction between the short-run and the long-run. Recall our discussion in the first lecture in which we said that a factor is anything used in production process. Therefore we sometimes refer to a factor as a “factor of production.” There are essentially five types of factors: labor, materials, energy, land and capital. It is convenient to divide these into two groups by how easily and quickly a firm can vary them. For example, a firm whose sales have just declined significantly can more easily and quickly lay off workers than sell a factory. Therefore, understanding which factors can more easily and quickly be varied is important in understanding how firms behave.

Factors of Production

- ① MORE EASILY AND QUICKLY VARIED GROUP
 - A. Labor
 - B. Materials (Raw materials and intermediate materials)
 - C. Energy
- ② LESS EASILY AND QUICKLY VARIED GROUP
 - D. Land
 - E. Capital
 - Physical capital = buildings, machinery, equipment
 - Investment = change in physical capital

Example: A company has a building and 10 machines worth \$800,000. A year later they pay \$200,000 to buy 2 new machines. What is capital in each year in the firm and what is investment between the two years?

Answer: In the first year the capital is a building and 10 machines. A year later the capital is a building and 12 machines. Investment between the two years is +2 machines. The dollars are totally irrelevant when we use the terms “capital” and “investment” in economics.

Time Periods in Economic Analysis

- ① VERY SHORT RUN
No factors can be varied, therefore output (level of production) cannot be varied.
- ② SHORT RUN
One group of factors can be varied (variable factors) to vary output. Another group cannot be varied (fixed factors).
- ③ LONG RUN
All factors of production can be varied to vary output. Technology cannot be varied, however. Therefore the firm works with the current (given) technological knowledge to produce output.
- ④ VERY LONG RUN
Everything, including technology, can be varied.

Example

	Very SR	Short Run	Long Run	Very LR
Fast Food Restaurant	Up to 1 day	1 day - 3 months	3 months - 2 years	2 years and on.
Auto Factory	Up to 2 weeks	2 weeks - 2 years	2 years - 5 years	5 years and on.