Costs

Chapter 8-1
(my version of it)

Laugher Curve

A woman hears from her doctor that she has only half a year to live. The doctor advises her to marry an economist and to move to South Dakota.

"Will this cure my illness?" she asked.
No, but the half year will seem pretty long."

Introduction

• In the supply process, people first offer their factors of production to the market.
• Then the factors are transformed by firms into goods that consumers want.
  – Production is the name given to that transformation of factors into goods.

The Role of the Firm

• The firm is an economic institution that transforms factors of production into consumer goods – it:
  – Organizes factors of production.
  – Produces goods and services.
  – Sells produced goods and services.

The Role of the Firm

• A virtual firm only organizes production.
  – Virtual firms subcontract out all work.
  – More and more of the organizational structure of business is being separated from the business.
The Firm and the Market
- Firms are the production organizations that translate factors of production into consumer goods.

Production Tables and Production Functions
- A production table shows the output resulting from various combinations of factors of production or inputs.

Production Tables and Production Functions
- Marginal product is the additional output that will be forthcoming from an additional worker, other inputs remaining constant.

Production Tables and Production Functions
- Average product is calculated by dividing total output by the quantity of the output.

Production Tables and Production Functions
- Production function – a curve that describes the relationship between the inputs (factors of production) and outputs.

Production Tables and Production Functions
- The production function tells the maximum amount of output that can be derived from a given number of inputs.

Not in the text but an important concept to understand: Average Cost later!
A Production Table

<table>
<thead>
<tr>
<th>Number of workers</th>
<th>Total output</th>
<th>Marginal product</th>
<th>Average product</th>
</tr>
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<td>---</td>
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</table>

The Law of Diminishing Marginal Productivity

- Both marginal and average productivities initially increase, but eventually they both decrease.

The Law of Diminishing Marginal Productivity

- This means that initially the production function exhibits increasing marginal productivity.
- Then it exhibits diminishing marginal productivity.
- Finally, it exhibits negative marginal productivity.

The Law of Diminishing Marginal Productivity

- The most relevant part of the production function is that part exhibiting diminishing marginal productivity.

The Law of Diminishing Marginal Productivity

- **Law of diminishing marginal productivity** – as more and more of a variable input is added to an existing fixed input, after some point the additional output one gets from the additional input will fall.
The Law of Diminishing Marginal Productivity

- This law is also called the *flower pot law*.

- If it did not hold true, the world’s entire food supply could be grown in a single flower pot.