



# From the Production Function to the Cost Function

# Production, Inputs, and Cost: Building Blocks for Supply Analysis



## Chapter Introduction

7-1 The Economic Short Run Versus the Economic Long Run

7-2 Production, Input Choice, and Cost with One Variable Input

7-2a Total, Average, and Marginal Physical Products

7-2b Marginal Physical Product and the “Law” of Diminishing Marginal Returns

7-2c The Optimal Quantity of an Input and Diminishing Returns

7-3 Multiple Input Decisions: The Choice of Optimal Input Combinations

7-3a Substitutability: The Choice of Input Proportions

7-3b The Marginal Rule for Optimal Input Proportions

7-3c Changes in Input Prices and Optimal Input Proportions

7-4 Cost and Its Dependence on Output

7-4a Fixed Costs and Variable Costs

7-4b Input Quantities and Total, Average, and Marginal Cost Curves

7-4c The Law of Diminishing Marginal Productivity and the U-Shaped Average Cost Curve

7-4d The Average Cost Curve in the Short and Long Run