



Pearson

**Online Instructor's
Manual with Testbank**

for

Introduction to Agricultural Economics

7th Edition

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To the instructor

This book is designed to capture the relationships between the consumer and the firm and how the markets where they interact are affected by macroeconomic policies and global trade. An attempt is made to foster greater understanding of how a broad set of events taking place in markets and economies can bear on the decisions made by individual consumers and producers. The book flows from micro to markets and to macro concepts. But we attempt once arriving at macro concepts to relay how macro policies can affect markets and individual market participants.

We initially define the field of economics and then develop a definition of agricultural economics based upon the broad role that agricultural economists play at the micro and macro levels. Emphasis throughout the book is place on applicability of economics to decisions made in the nation's food and fiber industry. Part 2 helps the student understand the decisions made by individual consumers and the market demand curve. Particular emphasis is placed on the measurement and interpretation of elasticities. Part 3 focuses on decisions made by producers under conditions of perfect and imperfect competition and the market supply curve. Part 4 pertains to natural resources and the environment as well as the role of government in the nation's food and fiber industry. Part 5 focuses on the macroeconomics of agriculture by

initially addressing measuring and understanding macroeconomic activity and policy. The effects of specific changes in macroeconomic policy are traced back to agriculture and their impact at the individual producer level. Finally, Part 6 focuses on international agricultural trade, its importance to U.S. agriculture, and the measurement and applicability of foreign exchange rates as they affect trade flows and market shares in a global agricultural framework.

This book is accompanied by a set of chapter power point slide shows designed to emphasize key points covered in each chapter. A set of questions presented in the “Testing Your Economic Quotient” section at the end of each chapter helps underscore key concepts in the chapter. The answers to all of these questions are available in this instructor’s manual.

Syllabi

Our collective experience in teaching introductory courses in agricultural economics in a 16-week semester setting suggests all six sections of the book can be addressed with the choice being the level of emphasis placed on individual topics.

An introduction to the field of agricultural economics can be taught in either a single semester or a two semester sequence where the first semester focuses on microeconomic topics ending with welfare analysis and the second semester focuses on macroeconomics and trade.

Our experience has been in a single semester setting which forces the instructor to pick and choose the topics deemed essential for the beginning student. For example, Chapters 1 through 9 dealing with the scope of the food and fiber industry through market equilibrium under conditions of perfect and imperfect competition provide an important foundation for additional courses in an agricultural economics curriculum. To allow for a complete treatment of the macroeconomic of agriculture covered in Chapters 12 through 15, one can assume that natural resource topics and sector-specific policy topics covered in Chapters 10 and 11 will be covered in other courses in the curriculum. Finally, Chapter 16 dealing with agricultural trade and exchange rates is essential in today’s global economy. Chapters 17 and 18 dealing with why nations trade and trade agreements can be covered if time is available.

Use of this book in a 10-week course obviously requires a narrower focus. One option would

be to cover the essential microeconomic topics in Chapters 3 through 9, the measurement of macroeconomic activity (Chapter 12), the macroeconomics of agriculture (Chapter 15) and agricultural trade and exchange rates (Chapter 16).

Chapter 1: What is Agricultural Economics?

CHAPTER OVERVIEW

The purpose of this chapter was to define the field of agricultural economics as a subset of the general field of economics. The major points made in this chapter may be summarized as follows:

1. Scarce resources are human and non-human resources that exist in a finite quantity. Scarce resources can be subdivided into three groups: (1) natural and biological resources, (2) human resources, and (3) manufactured resources.
2. Resource scarcity forces both consumers and farmers to make choices.
3. Most resources are best suited to be a particular use. Specialization of effort may lead to a higher total output.
4. The field of economics can be divided into microeconomics and macroeconomics. Microeconomics focuses on the actions of individuals -- specifically the economic behavior of consumers and farmers. Microeconomic analysis largely deals with the notion of partial equilibrium; events outside the market in question are assumed to be constant. Macroeconomics focuses on broad aggregates, including the nation's aggregate performance as measured by gross domestic product (GDP), unemployment, and inflation. Macroeconomic analysis normally deals with the notion of general equilibrium; events in all markets are allowed to vary.

5. Positive economic analysis focuses on what-is and what-would-happen-if questions and policy issues. Normative economic analysis focuses on what-should-be or what-ought-to-be policy issues.
6. Capitalism, or free market economics, socialism, and communism represent alternative economic systems. The U.S. economy represents a mixed economic system. Some markets are free to determine price, and other market prices are regulated.

CHAPTER OBJECTIVES

- ❑ Define economics and agricultural economics.
- ❑ Distinguish between the fields of macroeconomics and microeconomics.
- ❑ Discuss the difference between positive and normative economic policy analysis.
- ❑ Identify the three measures of economic performance in the economy.
- ❑ Discuss the economist's role at the microeconomic and macroeconomic level.
- ❑ Understand the concept of marginal analysis.

LECTURE OUTLINE

- ❑ Scope of Economics
 - Scarce Resources
 - Making Choices
- ❑ Definition of Economics
 - Microeconomic versus Macroeconomics
 - Positive versus Normative Economics
 - Alternative Economic Systems
- ❑ Definition of Agricultural Economics
- ❑ What Does an Agricultural Economist Do?
 - Role at Microeconomic Level
 - Role at Macroeconomic Level
- ❑ Summary

The coverage of the Chapter 1 power point slide show follows this lecture outline.

While no major changes were made from the 6th edition, a number of photos of pioneers in economics and key leaders in agriculture today enhance the student's interest.

ANSWERS TO TESTING YOUR ECONOMIC QUOTIENT EXERCISES

Exercises appearing on page 11-12:

1.
 - a. Natural resources
 - b. Human resources
 - c. Manufactured resources
2.
 - a. Alternative 2 because this alternative provides the maximum profit
 - b. \$12 million, the profit associated with the next best alternative
3.
 - a. Normative economics
 - b. Positive economics
 - c. Macroeconomics
 - d. Microeconomics
4. Change
5. Mixed (d).

6. Agricultural economics
7. Fallacy of composition (b).
8. The Belford family should grow cotton. In doing so, the net return per acre is \$195 as opposed to \$152.50 per acre for growing wheat and \$160 per acre for leasing. The next best alternative to the Belford family is leasing, As such, the opportunity cost to this family is a net return of \$160 per acre. The total economic cost in arriving at this decision is the \$285 per acre of production expenses in growing cotton plus the opportunity cost of \$160 per acre. Hence, the total economic cost is \$445 per acre.
9. Specialization
10. 1
11. Adam Smith
12. Thomas Piketty

Chapter 2: The U.S. Food and Fiber Industry

CHAPTER OVERVIEW

The purpose of this chapter was to acquaint the student with the structure and performance of the farm sector during the post-World War II period and its role in the nation's food and fiber industry. The major points made in this chapter may be summarized as follows:

1. The U.S. food and fiber industry consists of different groups of business entities called sectors, which are in one way or another associated with the supply of food and fiber products to consumers. In addition to the farm sector, this industry consists of firms that supply manufactured inputs to farms and ranches, firms that process raw food and fiber products, and firms that distribute food and fiber products to consumers.
2. Among the physical structural changes taking place in the farm sector during the post-World War II period is the trend toward fewer but larger farms. We have also seen a tremendous expansion in the use of manufactured inputs, such as machinery and chemicals, and a decline in labor use. Rising capital requirements in general during the period have increasingly represented a potential barrier to entry for would-be farmers.
3. Although the total quantity of inputs used in producing raw agricultural products has remained relatively stable during the post-World War II period, the total quantity of output has increased substantially. These results, taken together, imply an increase in productivity, or the ratio of output to inputs.
4. Gross farm income has increased, albeit somewhat erratically, during the post-World War II period, while production expenses have behaved in similar fashion. The result is a highly variable level of profits, or profitability, from one year to the next.
5. The financial structure of the farm sector during the post-World War II period shows that financial assets represent a considerably smaller portion of total farm assets. Real estate assets are the major component of farm asset..
6. The U.S. food marketing sector is the network of processors, wholesalers, retailers, and restaurateurs that market food from farmers to consumers. Approximately 83% of the personal consumption expenditures on food went to pay for activities taking place beyond the farm gate.
7. Along the flow of products from farmers to processors and eventually on to consumers, middlemen play a vital role. Classifications of middlemen firms include merchant middlemen firms, agent middlemen firms, speculative middlemen firms, processing and manufacturing firms, and facilitative organizations.
8. In recent times, the number of mergers and acquisitions in food industries has increased sharply relative to historical levels. Consequently, food industries have become more concentrated. Concentration is particularly high in industries marketing products such as breakfast cereals, beer, candy, and soft drinks.

9. The food processing industry and the wholesale and retail trade industries are characterized by a relatively small number of firms that account for a substantial portion of total industry sales. Although aggregate concentration has increased, the number of food marketing companies has remained relatively constant.
10. Farmers and ranchers get approximately 17% of the dollar spent on food. This share varies considerably by commodity. The remaining portion goes to food processors, wholesalers, and retailers. The major categories of expenditures include labor, packaging, transportation, and advertising.
11. The transportation of food and fiber products along the marketing chain is an extremely important component. The storing and exporting of nonperishable commodities is also an important dimension of the marketing of agricultural commodities.

CHAPTER OBJECTIVES

- ❑ Visualize the scope of the U.S. food and fiber industry.
- ❑ Understand the changing structure of farming.
- ❑ Define productivity and understand post-WW II trends.
- ❑ Discuss trends in real net farm income and equity of farmers.
- ❑ Understand the role played by other firms in the food and fiber system.
- ❑ Understand the notion of how economists report measures of economic activity.
- ❑ Understand how to calculate and interpret output and price indices
- ❑ Understand the difference between real and nominal measures of economic activity.

LECTURE OUTLINE

- ❑ Measuring and Interpreting Indices
- ❑ What is the Food and Fiber Industry
- ❑ Changing Complexion of Farming
 - Physical Structure
 - Specialization, Diversification, Organization and Contracting
 - Productivity
 - Profitability
 - Financial Structure
- ❑ Other Sectors in the Food and Fiber Industry
 - Farm Input Suppliers
 - Food Processors, Wholesalers, and Retailers
 - Value-Added Process
 - Fiber Manufacturers
 - Shippers and Handlers
 - Importance of Export Markets
- ❑ Summary

The coverage of the Chapter 2 power point slide show follows this lecture outline. While no major changes were made from the 6th edition, selected charts and figures have been updated where appropriate with information available at the time of publication. Minor changes were made to the questions at the end of the chapter.

ANSWERS TO TESTING YOUR ECONOMIC QUOTIENT EXERCISES

Exercises appearing on page 38-40:

1. c, between 10 and 15.
2. \$14 million, net worth=assets-liabilities
3. marketing bill
4. b
5. d
6. (a) farm input suppliers; (b) farmers; (c) food processors and manufacturers; (d) food wholesalers, retailers, and food service purveyors; (e) consumers
7. Labor
8. 20
9. \$30,000
10. 0.9; 1.25; 1
11. a, b, c
12. 2
13. (a) \$350,000; (b) \$8 million
14. (a) 0.9333; (b) 0.9655; (c) 2010
15. \$60,000
16. see Table 2-1
17. see Table 2-2
18. inflation
19. a
20. d
21. c