

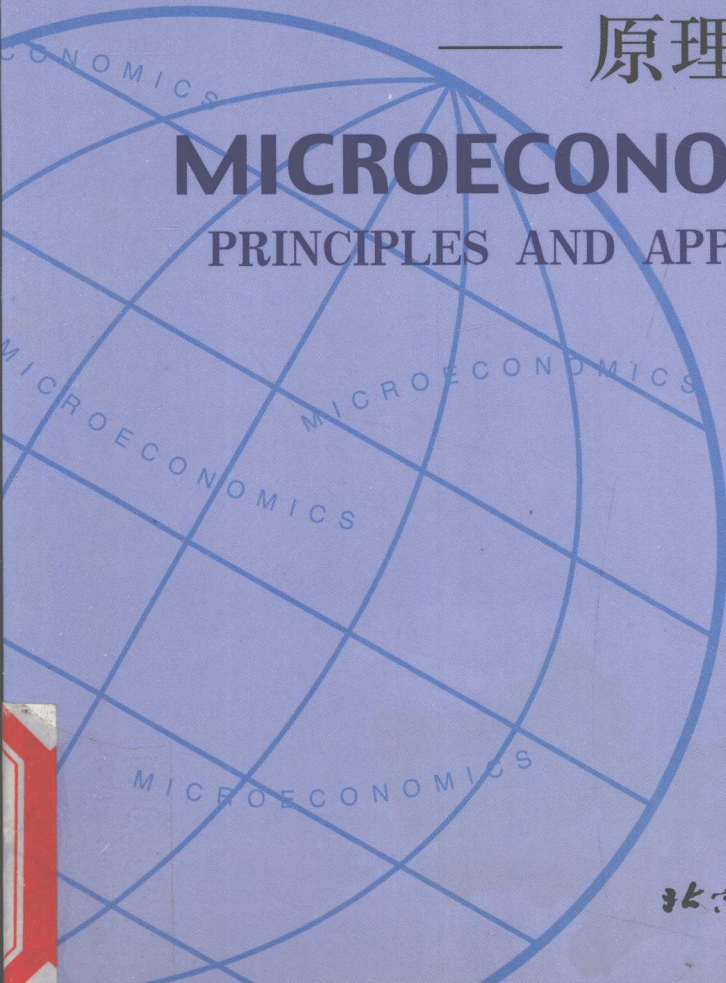
英语金融专业系列教材

微观经济学

—— 原理与应用

MICROECONOMICS :
PRINCIPLES AND APPLICATIONS

栗勤 著



北京语言大学出版社

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(京)新登字 157 号

图书在版编目(CIP)数据

微观经济学——原理与应用=Microeconomics:Principles and Applications/栗勤著.
-北京:北京语言大学出版社,2004
ISBN 7-5619-1336-2

I. 微…

II. 栗…

III. 微观经济学-高等学校-教材-英文

IV. F016

中国版本图书馆 CIP 数据核字 (2004) 第 051921 号

书 名: 微观经济学——原理与应用

责任印制: 乔学军

出版发行: 北京语言大学出版社

社 址: 北京市海淀区学院路 15 号 邮政编码 100083

网 址: <http://www.blcup.com>

发行部电话: 82303648 82303591

E-mail: fxb@blcu.edu.cn

印 刷: 北京北林印刷厂

经 销: 全国新华书店

版 次: 2004 年 9 月第 1 版 2004 年 9 月第 1 次印刷

开 本: 850 毫米×1168 毫米 1/32 印张: 10.5

字 数: 331 千字

书 号: ISBN 7-5619-1336-2/G·04039

2004 WY 0011

定 价: 21.00 元

凡有印装质量问题本社负责调换, 电话 82303590。

《英语金融专业系列教材》

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Preface

Since China's entry into the World Trade Organization, it has become increasingly integrated with the rest of the world and more and more Chinese universities and colleges have started offering specialized courses in English so as to equip students with professional knowledge as well as its corresponding English. That is the reason that many English textbooks from abroad, especially from the US, have been used for teaching at the Chinese higher institutions.

However, according to my experience, English textbooks written by foreign experts are not perfectly suitable for the Chinese students. Apart from their tough language and complex sentences, the western way of thinking and particular cultural backgrounds often puzzle the young minds of the Chinese students. When I taught economics at the University of International Business and Economics using an English textbook written by foreign economists, I had to spend a lot of time explaining the meanings of some sentences in the textbook to my students and introduce the different backgrounds to them when proceeding with my lecture. As a result, less teaching time could be devoted to the study of basic economic theories and principles. My experience tells me that a good economics textbook in English suitable for the Chinese students should not only be written in easy-to-understand and readable language, but also fit well with the Chinese background and way of thinking.

With that in mind, I have written this textbook—*Microeconomics: Principles and Applications*.

This textbook is meant for the Chinese students intending to take a course in microeconomics or economics in English. It can also be used by anyone with a basic grasp of English language who is interested in under-

standing or appreciating how a modern economy functions.

The purpose of studying economics is not just to pass examinations, or to get a high grade, but to develop a way of economic thinking and apply what we have learnt to problem-solving. That is why in this book I put stress on relevance and applications by carefully selecting one or two examples in each of the fourteen chapters. These examples show how microeconomic theories and principles can be used to explain and analyze economic behaviors and to make managerial and public policy decisions. They also help students appreciate the usefulness of microeconomics.

Though many economics textbooks written by foreign economists abound with real-world examples, nearly all of them are derived from developed economies, especially from the US economy. To the Chinese students, it seems that economics is far away from them. To correct this deficiency, I have chosen examples from the everyday experiences of the Chinese people, such as "what is your opportunity cost of going to a university?" (Chapter 1), "the falling price of mobile phones in China" (Chapter 2), "bonus in cash or in kind?" (Chapter 5), "the economic costs and profit of a restaurant" (Chapter 7), "the interest rate war in China's banking industry" (Chapter 10), "the savings behavior of the Chinese people" (Chapter 12), "the control of noise pollution by the government" (Chapter 13) and "asymmetric information in China's consumer credit market" (Chapter 14). Since every Chinese student is more familiar with these examples in his or her daily life, the analysis of them will arouse students' enthusiasm in studying microeconomics and help them develop their abilities to analyze and solve economic problems. These abilities are extremely important for would-be economists or practitioners in the future development of China's market economy.

Though the book covers a comprehensive and up-to-date topics, including the game theory, and asymmetric information, I have made every effort to simplify the technical level and the complexity of the discussion whenever and wherever possible. The important ideas concerning econom-

ics are explained in plain and understandable language instead of calculus, thus students with no mathematical background will find it easy to understand.

What is more, to help the Chinese students better understand the texts written in English, all the special terms appear in bold face when they are first introduced in the texts, and then defined in Chinese in the notes at the end of each chapter. It can help build in the minds of the students a connection between English and Chinese terms. Apart from that, some important sentences italicized are explained in Chinese also in the notes at the end of each chapter. I am sure these features will help students overcome difficulties in reading this book, thereby bettering their mastery of this course.

If teachers, students and other readers have any suggestions or comments to make, please e-mail me at suqin@UIBE.edu.cn so that I can improve my work in the future.

Su Qin

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Chapter 1

Introduction

The world we live in is filled with numerous economic problems. Almost everyone of us encounters them in our daily life. As consumers with a fixed amount of income, we have millions of goods and services to choose from, and we have to decide, for example, whether to buy a luxurious house in the suburbs with the trouble of traveling a long distance from home to the work place, or to put up with a less comfortable apartment downtown with the convenience of city life (including the shorter traveling distance between home and the work place). As students who are planning for the future, we have to choose between pursuing further study as postgraduate students and taking a job in the labor market upon graduation from college or university. As employees, we frequently ask ourselves if it is necessary to find a second, or a third job so as to earn more income, or to spend a long holiday somewhere and get ourselves completely relaxed. As producers, we are confronted with even more economic choices, such as “Where should we invest our money?” “Should we open a new plant to produce computers or to produce fast food?” “How much output should we produce and what price should we charge?” “Should we increase our sales revenue by raising or lowering the price of the product?” Questions like these perplex us every day. To solve these problems involves a lot of economics.

Economics is not only associated with our individual life, but also occupies a center stage in society. Each country or nation has to find a good way to keep the national economy growing at a sustainable rate and at the same time make sure that the environment is well protected. As the

largest developing country in the world, China needs to find answers as to how to keep an annual economic growth rate at about 7%-8%, how to re-employ laid-off workers, how to further stimulate consumer demand, and so on. There are no easy answers to these questions, but economics provides us with a powerful tool to understand these questions and to discover the truth behind them.

After reading this textbook, you will be able to understand a wide range of real-world economic issues, to know how the economy is organized and how it behaves, and to analyze how economic policies and the rapidly changing world affect our individual life and our economy as well.

As an introductory part, this chapter is designed to explain what economics is about. We start by defining economics, with a focus on the core economic problem of scarcity and choice. Then we explore two important concepts — opportunity cost and production possibility frontier, which will help you gain further insight into the core economic problem. Next, we explain how economists develop theories and models to analyze economic problems. We finally distinguish between two branches of economics: microeconomics and macroeconomics, with the former being the subject of this textbook.

1.1 What Is Economics?

Economics is the science that studies how people and society allocate scarce resources in the most efficient way so as to best satisfy the unlimited desires of human beings.

At the first glance, the definition seems so abstract. But notice the important concept mentioned here: scarce resources. To better understand what economics is, we have to start from looking at this fundamental concept — scarcity.

Scarcity and Choice

Scarcity refers to the fact that available resources are insufficient to

produce enough goods and services to satisfy all our desired uses; neither individuals nor the society can have everything we want.

Would you like some more new clothes, a more comfortable living place, a nicer car, more schooling and a longer vacation? Most of us would, but constrained by our budget, we cannot have everything we want. Even if someday we are rich enough to afford them all at once, some other desires, such as a luxurious villa, a private airplane, overseas vacations and a trip to Mars will arise. It is human nature to prefer more goods and services to less, and it is also human nature to have new desires develop as soon as the original wants have been satisfied. In one word, human desires are virtually unlimited.

Our society is also confronted with constraints and can never have everything as desired. If we build more dams and irrigation systems, we will have to give up some other goods, perhaps better transit systems; and when more money is spent on national defense, less money will be available for civilian goods and services. There is always a limit to output because the resources we use to produce goods and services are limited, scarcity prevents us from having as much as we would like.

Faced with the imbalance between our desires and available resources, we are forced to make choices — to select among potential alternatives. Economics is the study of how people and society make choices to use resources most efficiently.

Resources: Factors of Production

Resource is another word for **factor of production**¹. It is an input used to produce goods and services. There are three basic categories of resources: land, labor and capital.

- Land refers not only to the ground, but also to all natural resources, such as rivers, oceans, mineral deposits, and forestry, which are undoubtedly very important resources. Without them it is almost impossible to undertake any productive activities.

- Included in the category of labor are the productive knowledge, skills and strength of human beings. It is the human labor that transforms natural resources or raw materials into useful products.

- Things like tools, machines, equipment and buildings used in the production of other goods are called capital. Capital enhances our productive ability by allowing us to produce more efficiently.

Apart from the above three, some economists suggest that there is a fourth category of factor of production: **entrepreneurship**². It refers to the ability to organize, coordinate and manage production. An entrepreneur is the person who brings together all the factors of production to produce a new or an improved product. The role of entrepreneurs has been becoming more and more important in our society.

All of these factors of production are combined to produce goods and services. For example, the construction of highways requires workers, machines and tools. It also needs some land on which the highways are built and someone who has good ideas to assemble the resources. The more of these factors of production we have, the more potential output we will produce. However, no matter how large the amount of the resources is, they are always limited in quantity in the sense that people always want more goods and services than what can be produced with the resources.

You may wonder why our output can increase so rapidly and our living standard be greatly improved if resources are scarce. It is true that we have witnessed tremendous changes during the past century. In China, most people nowadays do not have to worry about the basic necessities — food, clothing and shelter. Though life is still difficult for people in some parts of the country, we have won battle against poverty in many regions. However, we have never solved the problem of scarcity. Even in the wealthiest countries where people are enjoying even more goods and services, the desire for goods and services still far outstrips the ability of people to produce them.

Three Basic Decisions

Since scarcity is the core and an eternal problem facing human beings, choice is the natural consequence of scarcity. Available resources must be allocated to their most efficient uses so as to best satisfy human wants. In the resource allocation, each nation or society has to make three basic decisions:

- What and how much to produce. There are millions of goods and services, and millions more combinations of each output. We must first decide what specific goods and services — food, clothing, housing, highways, automobiles, education, etc. — to produce and how much to produce. As resources are always limited, we can only produce more of automobiles by using more labor, land, capital and entrepreneurship. That means we have to cut back the production of some other goods so as to release these inputs. The choice of what and how to produce (simply “what” decision) is the foremost decision human beings have to make.

- How to produce. There are different ways of producing goods and services; we must choose one that best fits our needs. Should we use more labor or more capital in the production? Should we use gas or fuel to drive automobiles? Should we generate electricity by burning coal or by using polar power or by nuclear power? In making all these decisions (or the “how” decision), we have to compare the cost of each production method with its benefit not only from the perspective of individual firms but also from the perspective of society as a whole.

- For whom to produce. This is equivalent to asking who is to get the produced output, or how the output is to be distributed among different groups in society. Should each person get an equal share of the output no matter how much he or she contributes to the production? Or should the output be distributed according to each person’s contribution? How to distribute the output so that each person’s desire can be best satisfied?

By whom all these decisions are made depends on the organization of different economic systems.

Market Economy, Command Economy and Mixed Economy

There are three different ways an economy is organized: **market economy**, **command economy** and **mixed economy**³.

- **Market economy.** In a market economy, individual consumers and firms make the decisions as to what, how and for whom to produce. There is no plan ahead of time made by the government for guiding the production and distribution, but millions or even billions of consumers and producers communicate and interact with one another simply by using the price signal. If consumers' demand for washing machines goes up, the total sales of washing machines will increase, thus pushing up the price. Producers, noticing the profit potential, will attempt to produce more washing machines by using more available resources. The opposite will happen if consumers' demand for them declines. In deciding how to produce, producers who seek to maximize profit will try to use the least-cost or highest-efficient method of production. The output will be distributed to the highest bidder, the person who is willing and able to pay the highest price for a good.

It was widely believed that market economy was able to allocate resources most efficiently by means of price signals, and governments should adopt a "*laissez faire*"⁴ policy and leave the economy to operate by itself.

- **Command economy.** Also called planned economy, command economy is an organization of economic system where the government has the final say in deciding what, how and for whom to produce. It is the government of a society who owns most of the scarce land and capital, runs the enterprises and directs the production and distribution. The central planners choose the output mix that they believe best meets the needs of their people, and guarantee everyone with the basic daily necessities.

● **Mixed economy.** As the name suggests, mixed economy refers to the organization where both market and non-market signals are used to allocate scarce resources. In modern society, no economy belongs to the above two extremes. Instead, nearly every economy lies somewhere in between, with differences in specific mixes chosen. In the US and Hong Kong—China's special administrative region, most activities are market-oriented, and the market mechanism plays a very important role in resource allocation. But in China's mainland, though the government has withdrawn from a great number of areas and private enterprises have flourished during the past two decades, the government still has the ownership of many large firms that are mostly in the key industries. Therefore, the transformation of China's planned economy into a full-fledged market system with Chinese characteristics is an enduring and hard task ahead of us.

1.2 Opportunity Cost and Production Possibility Frontier

Since productive resources are scarce, and the use of them always involves a cost. This section introduces a way to analyze the limited resources for people and society using the two important concepts — opportunity cost and production possibility frontier.

Opportunity Cost

The use of resources in one way diverts the resources away from other ways that are also desired. The highest valued alternative that must be given up as a result of our choice is the **opportunity cost**⁵. For example, a piece of land in a town has many alternative uses: such as constructing a house or a plant on it, building on it an auditorium or entertainment park or a library and so on. All of them are desired by the people in the town. If the final decision is made to build an entertainment park, the land on which the entertainment park is built will not be avail-