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高等院校双语教学适用教材

经济学

Microeconomics

(2nd edition)

Wyn Morgan Michael Katz Harvey Rosen

微观经济学

(第2版)

〖英〗 温·摩根

〖美〗 麦克尔·卡茨 哈维·罗森 著

程坦 译注

东北财经大学出版社
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出版者的话

当前，在教育部的大力倡导下，财经和管理类专业的双语教学在我国各大高校已经逐步开展起来。一些双语教学开展较早的院校积累了丰富的经验，同时也发现了教学过程中存在的一些问题，尤其对教材提出了更高的要求；一些尚未进入这一领域的院校，也在不断探索适于自身的教学方式和方法以及适用的教材，以期时机成熟时加入双语教学的行列。总之，对各类院校而言，能否找到“适用”的教材都成为双语教学成功与否的关键因素之一。

然而，国外原版教材为国外教学量身定做的一些特点，如普遍篇幅较大、侧重于描述性讲解、辅助材料（如习题、案例、延伸阅读材料等）繁杂，尤其是许多内容针对性太强，与所在国的法律结构和经济、文化背景结合过于紧密等，却显然不适于国内教学采用，并成为制约国内双语教学开展的重要原因。因此，对国外原版教材进行本土化的精简改编，使之变成更加“适用”的双语教材，已然迫在眉睫。

东北财经大学出版社作为国内较早涉足引进版教材的一家专业出版社，秉承自己一贯服务于财经教学的宗旨，总结自身多年的出版经验，同麦格劳—希尔教育出版公司、培生教育出版集团和圣智出版集团等国外著名出版公司通力合作，在国内再次领先推出了会计、工商管理、经济学等专业的“高等院校双语教学适用教材”。这套丛书的出版经过了长时间的酝酿和筛选，编选人员本着“品质优先、首推名作”的选题原则，既考虑了目前我国财经教育的现状，也考虑了我国财经高等教育所具有的学科特点和需求指向，在教材的遴选、改编和出版上突出了以下一些特点：

- 优选权威的最新版本。入选改编的教材是在国际上多次再版的经典之作的最新版本，其中有些教材的以前版本已在国内部分高校中进行了试用，获得了一致的好评。
- 改编后的教材在保持英文原版教材特色的基础上，力求内容精要，逻辑严密，适合中国的双语教学。选择的改编人员既熟悉原版教材内容，又具有本书或本门课程双语教学的经验。
- 改编后的教材配有丰富的辅助教学支持资源，教师可在网上免费获取。
- 改编后的教材篇幅合理，符合国内教学的课时要求，价格相对较低。

本套教材是在双语教学教材出版方面的一次新的尝试。我们在选书、改编及出版的过程中得到了国内许多高校的专家、教师的支持和指导，在此深表谢意，也期待广大读者提出宝贵的意见和建议。

尽管我们在改编的过程中已加以注意，但由于各教材的作者所处的政治、经济和文化背景不同，书中的内容仍可能有不妥之处，望读者在阅读中注意比较和甄别。

东北财经大学出版社

简要目录

详细目录

Brief Contents

第1章

The Market Economy
市场经济

What is to be done?

Lenin

学习目标

学习完本章后，你应该能够：

- 了解到是如何界定经济学这一学科的。
- 明确微观经济学和宏观经济学之间的区别。
- 了解到是如何定义稀缺性这一概念的及其对经济学的重要性。
- 学习到经济模型是什么及其对帮助理解经济问题的价值。
- 考察实证分析和规范分析之间的区别。
- 分析市场机制是什么以及如何运作。

In the closing years of the first decade of the twenty-first century it is increasingly difficult for those in western economies to imagine how peoples in neighbouring countries were denied the opportunities and potential for individual achievement that they have had. In particular, when future historians look back on the close of the twentieth century, one of the most sweeping changes they will note is the collapse of centrally planned economies in eastern Europe. It is not far off to say that the cold war between the western allies and the Soviet Union was won not by the armies of the Allies, but by the productive power of western market economies. Mikhail Gorbachev, then leader of the Soviet Union, concluded that his country's economy could not afford to continue its global military competition with the United States. The Soviet economy

was simply too inefficient. He set his country on a new, more market-oriented course, in the process touching off political and economic upheavals.

Why did centrally planned economies fail while market systems survived? Gorbachev's own words provide some insight. In a 1987 speech, four years before the Soviet Union's abandonment of communism, he noted that, "one can see children using a loaf of bread as a ball in football". Presumably, Gorbachev was irked by the wastefulness of using bread for child's play, but even if Gorbachev was irritated by seeing the bread squandered, one still wonders why he bothered to bring it up in a major speech. To think about this issue, one must ask why the Soviet youngsters were playing with the bread in the first place. The answer is that Soviet consumers did not put much value on bread because the price they paid for it was very low. Provided that they could buy all the bread they wanted at this low price, why would consumers bother to economize on its use? If a loaf of bread cost only the equivalent of a few pennies, *why not* let the children have a little fun by playing football with it?

We think that Gorbachev may have related this anecdote because he viewed it as symptomatic of the problems facing the Soviet economy. In 1987 the prices of all goods were set by central planners in Moscow. In many cases, commodities were priced so low that consumers felt no compunction about being wasteful. Moreover, many prices were set below production costs. In such cases, producers had little incentive to bring their wares to market: "[M]uch food rots long before it gets to the grocery store . . . Supplies are sporadic – butter one day, none the next – so most shoppers cruise the stores daily and hoard whatever looks interesting, just in case" (Keller 1988: A6). Other economies based on the Soviet model experienced similar problems. Polish prime minister Zbigniew Messner, for example, complained: "There are . . . erroneous motivational systems, shortcomings in the organization of labour, lack of respect for social property" (Tagliabue 1987: 11). These difficulties were an important reason for the political upheavals that swept eastern Europe, beginning in 1989 and ending with the overthrow of communism. Thinking about why centrally planned economies had such difficulties will help us define the subject matter of economics and the purpose of this book.

1.1 Scarcity and Economics 稀缺性和经济学

The difficulties of the centrally planned societies were a consequence of the way in which they dealt with the phenomenon of scarcity. Virtually all resources are scarce, meaning that there are not enough of them to satisfy all the desires of all people. By "resources" we refer not only to natural resources (oil, trees, land and water) but also to human resources (labour) and capital resources (machines and factories). An important implication of the presence of scarcity is that people and societies must make choices among a limited set of possibilities. The choice to have more of one thing, like bread, necessarily means having less of other things. In the Soviet Union these decisions were made by central planners; in effect, Gorbachev was complaining that this approach to dealing with scarcity was leading to undesirable results. Indeed, in a subsequent speech, he was more explicit: "The tendency to encompass every nook of life with detailed centralized planning and control literally straitjackets society."

经济学
人们和社会如何处理稀缺性的学问。

The problem of scarcity is not confined to centrally planned economies. All societies must make choices about how to use their scarce resources; the way that societies differ is in *how* these decisions are made. **Economics** is the study of how people and societies deal with scarcity. The subject of this book is **microeconomics**, which focuses on the economic behaviour of individual decision-making units. The

prefix *micro*, which means "small", is somewhat misleading. To be sure, microeconomists spend a lot of time analysing the behaviour of relatively small decision makers, such as individual households and firms. However, microeconomists are equally concerned with the big picture – how these individual decisions fit together and what kind of results they produce for society. However, we exclude a systematic treatment of how the economy-wide inflation and unemployment rates move over time (the business cycle). These topics belong in the realm of **macroeconomics**, which focuses on the behaviour of the economy as a whole, with less attention devoted to the activities of individual units.

微观经济学
经济学的一个分支，主要研究个别决策单位，诸如家庭和企业等的经济行为，以及这些个别决策是如何协调在一起的。

宏观经济学
经济学的一个分支，主要研究经济社会作为一个整体的行为，特别是通货膨胀、失业和经济周期问题。

The Three Questions 三个问题

Because of scarcity, every society *inescapably* has to answer three questions:

1 What Is to Be Produced? 生产什么

As already stressed, in the presence of scarcity, producing more of one thing means producing less of another. A society therefore has to choose how many compact disc players, ballpoint pens, missiles, or any other commodity it is going to produce. This leads us to an important concept in economics: opportunity cost. When more of commodity *X* is produced, resources are used up. These resources could have been used to produce alternative commodities. The most highly valued of these forgone alternatives is the **opportunity cost** of *X*. Essentially, the opportunity cost of something is *what you give up* by having it.

机会成本
放弃的本来可供选择的最高价值。

US president Dwight Eisenhower showed a keen grasp of the concept of opportunity cost in this discussion of the true cost of defence:

> Every gun that is made, every warship launched, every rocket fired signifies, in the final sense, a theft from those who hunger and are not fed, those who are cold and are not clothed. This world in arms is not spending money alone. It is spending the sinew of its labourers, the genius of its scientists, the hopes of its children. (Ambrose 1984: 95)

The notion of opportunity cost is as applicable at the individual level as at the societal. Consider, for example, a peasant from China named Xiong Qiangyun, who proudly told a reporter that his son was in college: "It's been expensive, so I haven't been able to build a very nice house or buy a television. But my boy's in college" (Kristof 1992: A15). The opportunity cost of the education of Mr Qiangyun's son was the consumer durables forgone by the rest of the family.

The Infinity of Outer Space Appears to be Constrained Too!
无限的外层空间问题也表现出要受限制

Whatever the scale of the choice being made, there will always be an opportunity cost; whether it is a government deciding how to allocate its tax revenues on public spending or an individual person deciding on how to spend their income as we saw with the Chinese peasant. In both cases, the choice will have an opportunity cost that measures the value of that choice.

To contrast the Chinese peasant case, consider the European Union and the spending allocation of its budget. In late 2007[a], the Commission of the European Union faced a significant ▶

choice and, while the scale of it was very much larger than Xiong Qiangyun's simply in absolute euro value terms, the process of making the choice with its own opportunity cost was exactly the same.

In its desire to maintain a presence in the race with the US for new global positioning satellite (GPS) technology, the EU Commission decided to invest a further €2.7 billion on its struggling Galileo project. The money could not be raised from further taxation and had to come from the EU's existing budget. As a consequence, spending on some other activity had to be reduced. In this case, the decision was made that the agricultural budget would be reduced to free up money to spend on space exploration. Here, then, the opportunity cost of continued space exploration is support for farmers across the Union.

[a] Based on "US Acts to Retain Lead with GPS", *The Financial Times*, 20 September 2007.

2 How Is It to Be Produced? 怎样生产

In the children's story "The Three Little Pigs", we are told that a house may be constructed out of straw, sticks or brick. This illustrates the important point that even after deciding what we want to produce, we have to decide how to produce it. Should houses be constructed of wood or should brick be used instead, so that the wood can be used for fuel? Perhaps straw should be used for housing, but then less would be available for fodder for livestock. Given that all resources are scarce, society must decide which resources to allocate to the production of various commodities.

3 Who Gets the Output? 谁得到产出

资源配置
社会资源如何在各种产出之间、生产这些产出的组织之间以及社会成员之间进行分配。

Because of scarcity, no one can have all of everything that he or she wants. Every society must develop some kind of mechanism for dividing up the output among its members. And in every society, the question of whether this mechanism leads to a "fair" distribution of the output is likely to be the subject of intense debate.

The way that our three questions are answered is referred to as the **allocation of resources** – how society's resources are divided up among the various outputs, among the different organizations that produce these outputs, and among the members of society. Although every society has to decide how to allocate its resources, societies differ greatly in how these decisions are made. As noted earlier, in centrally planned economies these decisions are made by government bureaux. In contrast, societies like Germany, France, the UK, the United States and Australia rely more heavily on a **market system**, in which resource allocation decisions are determined by the independent decisions of individual consumers and producers, without any central direction. Because the market system is the most important mechanism for resource allocation in western societies, it is the main focus of this book. Our goal is to understand how markets work, and to develop criteria for evaluating market outcomes (PC 1.1).

市场体系
资源配置是由个别的消费者和生产者的独立的决策和行动所决定的一种组织形式。

1.2 Models 模型

The task that we have set ourselves appears daunting indeed. In any large economy there are millions of products, consumers and firms. In a market system, consumers and firms all make

Progress Check 1.1

Evaluate this statement: "Saudi Arabia can pump all the oil that it needs. Therefore, consumption of oil is free in Saudi Arabia."

their own decisions; we have to understand how these decisions are made and how they fit together. How can we possibly hope to encompass all of this complexity? The answer is that we won't even try. Instead, we study how economies work using **models**, which are descriptions of phenomena that abstract from the details of reality. By "abstracting" from details we mean ignoring those details that are not essential to understanding the phenomenon at hand. That way we can concentrate on the really important factors. A classic example of a model is a road map. If you are trying to drive from Frankfurt to Cologne, you do *not* want a perfectly "realistic" description of the terrain that shows the location of every road, every house and every hill. Such a map would be so complicated that it would be useless. Instead, you want a map that abstracts from most details of the terrain and shows only the main roads and where they intersect.

模型
经济社会的某些情况的一种简化表述，通常包括方程和图形。

A Model of Educational Choice 教育选择的一个模型

You might never have thought about it this way, but like the Chinese peasant mentioned previously, your decision to attend university implicitly involved a choice in the presence of scarce resources. After all, you and your family only have so much money; spending it on tuition means having less available for other things. Even if tuition fees were zero, university would still be costly because your time has an opportunity cost – the time that you spend in education could be spent working, for example. Let's construct a model of the decision to attend university. Such an exercise will not only give you a good idea of what an economic model really is, but it will also introduce you to the way that economists typically approach problems.

Our simple model is based on the assumption that people make educational decisions on the basis of monetary costs and benefits. What are these monetary costs and benefits? As already suggested, some of the opportunity costs are explicit or direct (such as tuition and books); in addition we must take into account the opportunity costs of the student's time. On the benefits side, each year of education leads to some increase in the person's earning capacity – better-educated people get higher-paying jobs. Our model posits that, before deciding to enrol in university each year, an individual considers the monetary costs and benefits of doing so. If the additional monetary benefits exceed the costs, he enrols, and otherwise not. For example, if attending the first year of university costs €10,000 but this will enhance your lifetime earnings by €15,000, then you go to university. On the other hand, if it enhances your earnings by only €8,000, you do not. Why pay €10,000 to obtain a benefit of only €8,000?

Now, this model may strike you as being absurdly simple. It does not allow for the possibility that someone is in university just because his or her parents insisted on it. Neither does the model take into account that some people simply enjoy learning and are happy to pay tuition even if their future earnings aren't enhanced at all. However, the whole point of model building is to simplify as much as possible so that a problem is reduced to its essentials. Omission is the beginning of all good economic analysis. A model should be judged not on the basis of whether

or not it is "true", but on whether the model is plausible and informative. If a model founded on the assumption that educational decisions are based on monetary returns gives us good predictions, then it is useful, even if it does not encompass every possible explanation or predict the behaviour of every single individual.

Sometimes, however, a model can be *too* simple for one's purposes. For instance, suppose that it is harder for students from poor families to borrow money than it is for those from rich families. Then students from poor families may not be able to borrow enough money for tuition, even though attending university would greatly enhance their earnings. If such borrowing constraints are really important, then a model that ignored them would not produce very good predictions about educational decisions. A model must be as simple as possible, but not too simple! How do you know if a particular model is too simple? Unfortunately, there is no easy answer. If the model appears to be doing a good job of explaining the problem at hand, then there is no reason to complicate it further. Economists have found that models that explain educational decisions on the basis of financial returns do a pretty good job of predicting people's actual decisions. (See, for example, Blundell et al. 2000.)

So far, our model of educational decisions has used only words to describe the phenomenon; it is a verbal model. Verbal models are fine, but sometimes our understanding is enhanced when models are represented graphically. In Panel A of Figure 1.1 years of education are measured on the horizontal axis, and euros are measured on the vertical. The schedule labelled *MC* shows the cost of each *additional* year of school for a student whom we'll call Berthold. In economics, the word *marginal* is used to mean "additional", so the additional cost is called the *marginal cost*. The marginal cost is drawn sloping upwards, reflecting the assumption that the additional cost of each year of education increases over time, perhaps because tuition rises or because forgone wages become higher as the student becomes more educated. The schedule *MB* shows the

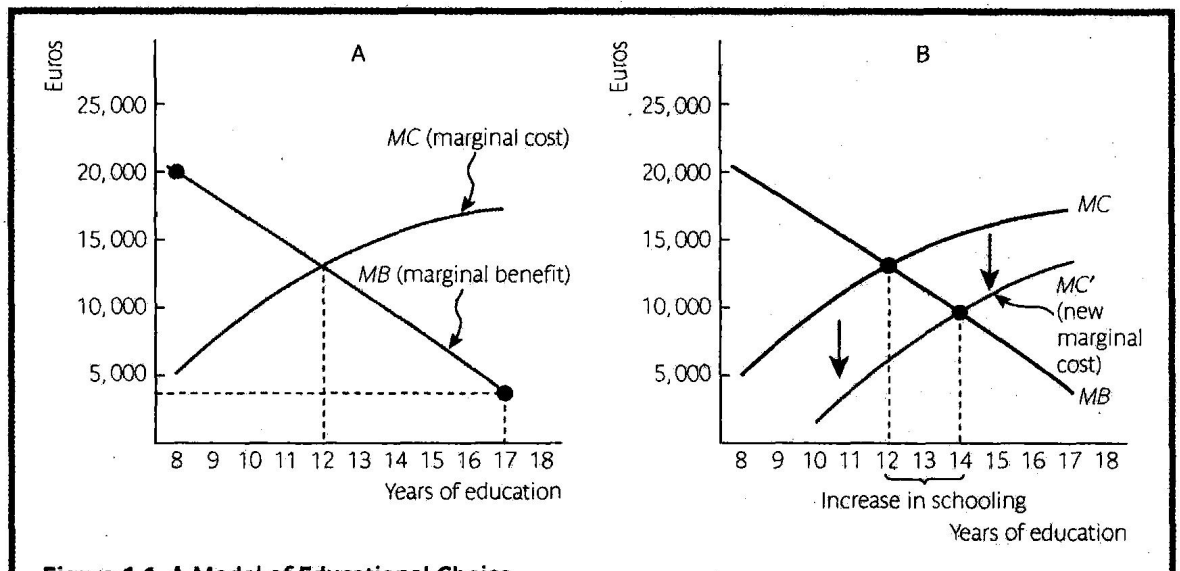

Figure 1.1 A Model of Educational Choice

Assuming that schooling decisions are based on monetary motives only, an individual attends only as long as the marginal benefit exceeds the marginal cost. In Panel A, to the right of 12 years the marginal cost exceeds the marginal benefit, so the student does not attend more than 12 years. Panel B embodies a prediction: if the marginal costs of school attendance fall, a person will spend more time in school.

marginal monetary benefit of each year of schooling for Berthold. It is drawn sloping downwards, which reflects the assumption that as more education is purchased, the amount by which it increases future earnings gets successively smaller. For example, the eighth year of schooling increases Berthold's lifetime earnings by €20,000. His seventeenth year increases lifetime earnings by €4,500, a smaller increase, but an increase nonetheless.

What is the Cost of a Business Degree? 什么是工商学位的成本

While we have seen that the financial return to further study influences whether an individual decides to remain in education, we have to recognize that these returns will be dependent on the subject chosen to study. For example, concern has been expressed in France[a] that students entering universities are shunning art, literature and cultural studies in favour of degrees that can generate higher earnings on completion of study such as business studies and economics.

We can identify two elements to the process of making decisions here. The first is whether students decide to stay on to study at university; we can identify the opportunity cost as we know that it is the earnings forgone. The second element is that individual student choice is based on studying a specific subject and students are now making a choice for which the opportunity cost is the subject forgone. Maybe the opportunity cost of studying an arts degree (the gain in earning potential from studying business or economics) is just too great for students – even those who would otherwise want to study arts subjects.

Many western economies are keen for more of their workforce to have a degree qualification and deciding to stay on is seen as a positive benefit. However, the choice of subject is a more difficult matter, since what is good for the individual might not be viewed as "good" by the rest of society. Many politicians and cultural commentators raise concerns about the long-term preservation of French cultural heritage and literature as the number of students taking degrees in these areas declines. As we will see later, though, the fact that returns to degrees in business and economics are high suggests the economy values those who take them more highly than those who take art and literature degrees.

[a] Based on "French Literature Pays Price as the Language of Money Lures Students", *The Times*, 12 September 2007.

How much education does Berthold consume? Note that at any level of education to the left of 12 years, the marginal benefit exceeds the marginal cost. Hence, from a monetary point of view, taking another year of education makes sense. On the other hand, at any level of education to the right of 12 years, the marginal benefit is less than the marginal cost. Our model therefore predicts that Berthold will enrol in school for just 12 years, the point at which the marginal benefit of a year of education just equals its marginal cost. The notion that sensible decision making requires an individual to set marginal benefit equal to marginal cost is sometimes called the *equimarginal rule*, and it will be encountered in various guises throughout this book.

Now suppose that Berthold's circumstances change. The marginal cost of each year of Berthold's education goes down, perhaps because of a decrease in current wage rates. (Remember, forgone wages are part of the cost of education.) Assuming that the marginal benefits stay the same, the new situation is depicted in Panel B. Similar logic to that of Panel A indicates that with lower costs Berthold chooses to be educated for 14 years. (He would attend two years of university.) A comparison of Panels A and B reveals an important function of models:

they allow us to make predictions of how behaviour will change when circumstances change. This is crucial, because it permits us to *test* whether the model is doing a good job. As stressed above, if the model provides us with good predictions, it is fine. On the other hand, if the model is not consistent with real-world observations, it must either be modified or discarded altogether. As the Chinese leader Deng Ziaoping said: "Seek truth from facts."

Models can be mathematical as well as verbal or graphical. Let *MB* be the marginal benefit of each year of education and *MC* the marginal cost. Then our main result is that people purchase education up to the point that the marginal benefit equals the marginal cost. This notion is expressed mathematically as

$$MB = MC$$

The nice thing about mathematical equations is that they allow us to summarize a model very succinctly. In this book, we will rely on all three types of model: verbal, graphical and mathematical (PC 1.2).

Interestingly, a methodology based on model building is by no means limited to economics. It is employed in "hard sciences" as well. The great theoretical physicist Stephen Hawking (1988: 11) observed: "A theory is a good theory if it satisfies two requirements: It must accurately describe a large class of observations on the basis of a *model* that contains only a few arbitrary elements, and it must make definite predictions about the results of future observation" [emphasis added]. Like the economy, the physical world is too complicated to be studied without recourse to models.

Progress Check 1.2

Suppose that there is a reduction in the marginal monetary benefits to attending school. Use Panel A of Figure 1.1 to predict how this would affect educational decisions.

Positive and Normative Analysis 实证分析和规范分析

实证分析
关于原因和结果的描述性表述。

We will use models for both positive and normative analysis. **Positive analysis** deals with statements of cause and effect. For example, a positive statement is: "If the German government cuts tuition subsidies to students from middle-income households, then the number of such students attending university will decrease." Note that a positive statement can in principle be confirmed or refuted by appeal to real-world observations. In this case, what you would have to do is determine whether enrolment of middle-income students actually fell after the subsidies were decreased.[1]

规范分析
具体体现价值判断的表述。

Positive statements do not indicate whether the phenomenon under consideration is "good" or "bad"; they merely attempt to describe the world. In contrast, **normative analysis** deals with statements that embody value judgements. The assertion, "All individuals who want to attend university ought to have free tuition", is a normative statement. One cannot confirm this statement by appealing to data; its validity depends upon one's ethical views. Keeping positive and normative views separated is sometimes difficult, but it is worth trying hard to do so. One's views about how the world *is* should not be clouded by opinions on how it *ought* to be.