高等院校双语教学适用教材
经济学

Introduction to Macroeconomics

Marc Lieberman
Robert E. Hall

宏观经济学导论

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马克·利伯曼
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图书在版编目（CIP）数据

宏观经济学导论/（美）利伯曼（Lieberman，M）等著；程坦译注．—大连：东北财经大学出版社，2006.7

（高等院校双语教学适用教材·经济学）

书名原文：Introduction to Economics

ISBN 7-81084-874-7

Ⅰ．宏… Ⅱ．①利… ②程… Ⅲ．宏观经济学—双语教学—高等学校—教材—英、汉 Ⅳ．F015

中国版本图书馆 CIP 数据核字（2006）第 066419 号

辽宁省版权局著作权合同登记号：图字 06-2006-65 号

东北财经大学出版社出版

（大连市黑石礁尖山街 217 号 邮政编码 116025）

总 编 室：（0411）84710523

营 销 部：（0411）84710711

网 址：http://www.dufep.cn

读者信箱：dufep@dufe.edu.cn

大连海事大学印刷厂印刷 东北财经大学出版社发行

幅面尺寸：210mm×270mm 印张：15 7/8 插页：1

2006 年 7 月第 1 版 2006 年 7 月第 1 次印刷

责任编辑：李智慧 李 季 责任校对：随 文

封面设计：冀贵收 版式设计：孙 萍

定价：28.00 元

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，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，同培生教育出版集团和汤姆森学习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

导　读

近年来，国内很多院校都在经济学的教学中采用了双语教学方式。双语教学可以有很多种形式，其最基本的形式是直接采用最新版本的外文原版教材，这种形式的最大优点在于可以使学生以最短的时间差接触到最新的当代经济理论。成功的双语教学不仅要求教师有较高的综合素质和学生们的积极配合，也需要有一本得心应手的合适教材。

我们荣幸地推荐马克·利伯曼和罗伯特·霍尔两位教授合著的这本当代经济学的基础教材。这本书之所以优秀，不仅在于两位作者杰出的才华，还在于他们珠联璧合的协作。

马克·利伯曼不愧是位成功的兼职剧作家，他的驾驭语言的娴熟技巧以及超乎寻常人的想象能力使他讲授的经济学教程在纽约大学、哈佛大学等名校一直极为叫座。在他的笔下，枯燥艰涩的经济学理论变得浅显易懂且趣味横生，干瘪的教学仿佛也被他赋予了生命，成为经济学百花园中一朵艳丽的小花。

而罗伯特·霍尔则是世界最著名的经济学大师之一。他对经济学的深邃目光以及严谨的治学态度使得本书虽为初级教材，却结构严谨，有足够的理论深度，并准确地把握住了当代经济学的发展脉搏。

本人从1988年起便在著名经济学家汪祥春教授的指导下在东北财经大学的硕士生、本科生、专科生的经济学教学中直接采用英文原版教材，先后采用过很多种不同的版本。根据我们的经验，本科生、专科生适用的英文原版经济学教科书需满足以下几个要求：

1. 作者应该是权威的经济学家。

2. 应该是最新版本。

3. 内容不要艰深，英文词汇不要生僻。

本书同时符合以上三个要求，非常适合作为本科生和专科生的经济学课程的双语教学用书。为了更好地帮助学生们理解，仅对本书作了如下几点工作：

1. 重要的、基本的经济词汇首次出现时，在页旁标出其中文译名以及简要解释。

2. 本书作者视经济学的基本原理为教学中的关键点，故当强调基本原理的应用时，页旁的小钥匙图形处给出了基本原理的内容。

3. 为了帮助学生更好地理解书中正文的内容，我在页旁采用楷体字或是给出一些有关的名言警句，或是对正文的内容作进一步的解释，供学生们参考。

我相信，凡是读过这本书的读者均会从中获得较大的收获，如果哪位读者有悔意的话，那他一定是后悔为何没能早些读到这本书。

程　坦

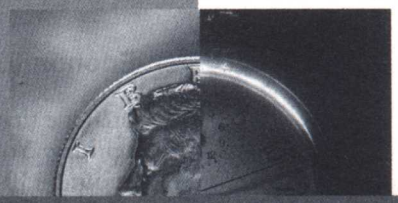
目　录

CHAPTER 1

Introduction to Macroeconomics

第 1 章

宏观经济学导论



本章概要

You have no doubt seen photographs of the earth taken from satellites thousands of miles away. Viewed from that great distance, the world's vast oceans look like puddles, its continents like mounds of dirt, and its mountain ranges like wrinkles on a bedspread. In contrast to our customary view from the earth's surface—of a car, a tree, a building—this is a view of the big picture.

These two different ways of viewing the earth—from up close or from thousands of miles away—are analogous to two different ways of viewing the economy. When we look through the *microeconomic* lens—from up close—we see the behavior of *individual decision makers* and *individual markets*. When we look through the *macroeconomic* lens—from a distance—these smaller features fade away, and we see only the broad outlines of the economy.

Which view is better? That depends on what we're trying to do. If we want to know why computers are getting better and cheaper each year, or why the earnings of business professors are rising so rapidly, we need the close-up view of microeconomics. But to answer questions about the *overall* economy—about the overall level of economic activity, our standard of living, or the percentage of our potential workforce that is unemployed—we need the more comprehensive view of *macroeconomics*.

MACROECONOMIC GOALS

While there is some disagreement among economists about *how* to make the macroeconomy perform well, there is widespread agreement about the goals we are trying to achieve:

Economists—and society at large—agree on three important macroeconomic goals: economic growth, full employment, and stable prices.

Why is there such universal agreement on these three goals? Because achieving them gives us the opportunity to make *all* of our citizens better off. Let's take a closer look at each of these goals and see why they are so important.

Economic Growth

Imagine that you were a typical American worker living at the beginning of the 20th century. You would work about 60 hours every week, and your yearly salary—about $450—would buy a bit less than $8,000 would buy today. You could expect to die at the age of 47. If you fell seriously ill before then, your doctor wouldn't be able to help much: There were no X-ray machines or blood tests, and little effective medicine for the few diseases that could be diagnosed. You would probably never hear the sounds produced by the best musicians of the day, or see the performances of the best actors, dancers, or singers. And the most exotic travel you'd enjoy would likely be a trip to a nearby state.

Today, the typical worker has it considerably better. He or she works about 35 hours per week and is paid about $34,000 per year, not to mention fringe benefits such as health insurance, retirement benefits, and paid vacation. Thanks to advances in medicine, nutrition, and hygiene, the average worker can expect to live into his or her late 70s. And more of a worker's free time today is really free: There are machines to do laundry and dishes, cars to get to and from work, telephones for quick communication, and personal computers to keep track of finances, appointments, and correspondence. Finally, during their lifetimes, most Americans will have traveled—for enjoyment—to many locations in the United States or abroad.

Economic growth 经济增长
在长期中物品与劳务生产的增加。

What is responsible for these dramatic changes in economic well-being? The answer is: **economic growth**—the increase in our production of goods and services that occurs over long periods of time. In the United States, as in most developed economies, the annual output of goods and services has risen over time, and risen faster than the population. As a result, the average person can consume much more today—more food, clothing, housing, medical care, entertainment, and travel—than in the year 1900.

Economists monitor economic growth by keeping track of *real gross domestic product* (*real GDP*): the total quantity of goods and services produced in a country over a year. When real GDP rises faster than the population, output per person rises, and so does the average standard of living.

Figure 1 shows real GDP in the United States from 1929 to 2002, measured in dollars of output at 1996 prices. As you can see, real GDP has increased dramatically over the greater part of the century. Part of the reason for the rise is an increase in population: More workers can produce more goods and services. But real GDP has actually increased *faster* than the population: During this period, while the U.S. population did not quite triple, the quantity of goods and services produced each year has increased more than tenfold. Hence, the remarkable rise in the average American's living standard.

But when we look more closely at the data, we discover something important: Although output has grown, the *rate* of growth has varied over the decades. From

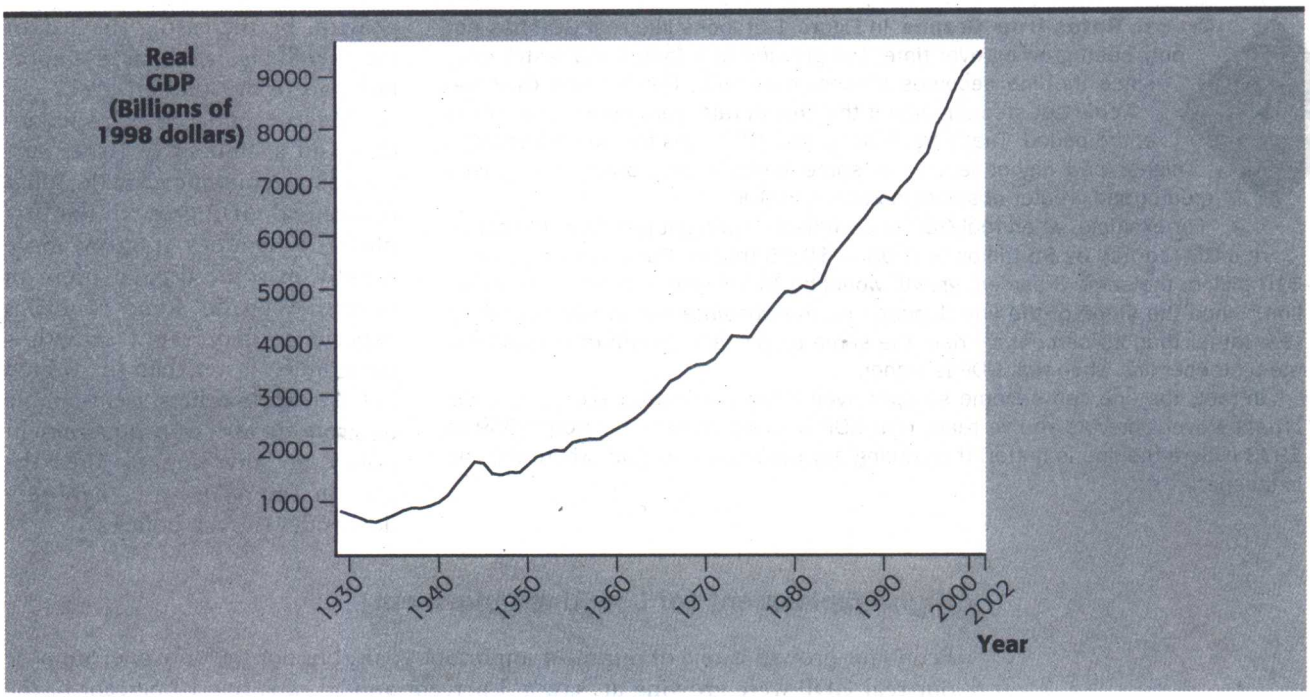


FIGURE 1
U.S. Real Gross Domestic Product, 1929–2002

Real GDP has increased dramatically over the past 73 years. In the figure, real GDP is measured in dollars of output valued at 1996 prices. (The measurement of real GDP will be discussed in more detail in the next two chapters.)

1959 to 1973, real GDP grew, on average, by 4.2 percent per year. But from 1973 to 1991, average annual growth slowed to 2.7 percent. Then, from 1991 to 2002, growth picked up again, averaging 3.7 percent per year. These may seem like slight differences. But over long periods of time, such small differences in growth rates can cause huge differences in living standards. For example, suppose that each year between 1973 and 2000, real GDP had grown by just one percentage point more than its actual rate. Then, over that entire period, the United States would have produced about $27 trillion *more* in goods and services than we *actually* produced over that period (valuing these goods and services at 1996 prices). That amounts to about $75,000 for each person in the population.

Economists and government officials are very concerned when economic growth slows down. Growth increases the size of the economic pie, so it becomes possible—at least in principle—for every citizen to have a larger slice. This is why economists agree that growth is a good thing.

But in practice, growth does *not* benefit everyone. Living standards will always rise more rapidly for some groups than for others, and some may even find their slice of the pie shrinking. For example, since the late 1980s, economic growth has improved the living standards of the highly skilled, while less-skilled workers have benefited very little. Partly, this is due to improvements in technology that have lowered the earnings of workers whose roles can be taken by computers and machines. But very few economists would advocate a halt to growth as a solution to the problems of unskilled workers. Some believe that, in the long run, everyone will indeed benefit from growth. Others see a role for the government in taxing successful people and providing benefits to those left behind by growth. But in either case, economic

DANGEROUS CURVES

Growth Rates from Graphs In Figure 1, it looks like real GDP has not only been growing over time, but growing at a faster and faster rate, since the line becomes steeper over time. But the real GDP line would get steeper even if the growth rate were *constant* over the entire period. That's because as real GDP rises from an increasingly higher and higher level, the same *percentage* growth rate causes greater and greater *absolute* increases in GDP.

For example, when real GDP is $5 trillion, 3 percent growth would cause real GDP to rise by $5 trillion × 0.03 = $0.15 trillion. But when real GDP is $10 trillion, the same 3 percent growth would be $10 trillion × 0.03 = $0.30 trillion. Since the slope of the line depends on the *absolute* rise in real GDP each year rather than its *percentage* rise, the same percentage growth rate would create a steeper line when real GDP is higher.

In fact, the line can become steeper even if the percentage growth rate *decreases* over time. As you've read, real GDP actually grew faster from 1959 to 1973 (where the line is flatter) than during any subsequent period (where the line is steeper).

growth, by increasing the size of the overall pie, is seen as an important part of the solution.

Macroeconomics helps us understand a number of issues surrounding economic growth. What makes real GDP grow in the first place? Why does it grow more rapidly in some decades than in others? Why do some countries experience very rapid growth—some much faster than the United States—while others seem unable to grow at all? Can government policy do anything to alter the growth rate? And are there any downsides to such policies?

High Employment (or Low Unemployment)

Economic growth is one of our most important goals, but not the only one. Suppose our real GDP were growing at, say, a 3 percent annual rate, but 10 percent of the workforce was unable to find work. Would the economy be performing well? Not really, for two reasons. First, unemployment affects the distribution of economic well-being among our citizens. People who cannot find jobs suffer a loss of income. And even though many of the jobless receive some unemployment benefits and other assistance from the government, the unemployed typically have lower living standards than the employed. Concern for those without jobs is one reason that consistently high employment—or consistently low *unemployment*—is an important macroeconomic goal.

But in addition to the impact on the unemployed themselves, joblessness affects *all* of us—even those who *have* jobs. A high unemployment rate means that the economy is not achieving its full economic potential: Many people who *want* to work and produce additional goods and services are not able to do so. With the same number of people—but fewer goods and services to distribute among that population—the average standard of living will be lower. This general effect on living standards gives us another reason to strive for consistently high rates of employment and low rates of unemployment.

One measure economists use to keep track of employment is the *unemployment rate*—the percentage of the workforce that is searching for a job but hasn't found one. Figure 2 shows the average unemployment rate during each of the past 80 years. Notice that the unemployment rate is never zero; there are always *some* people looking for work, even when the economy is doing well. But in some years, unemployment is unusually high. The worst example occurred during the Great Depression of the 1930s, when millions of workers lost their jobs and the unemployment rate reached 25 percent. One in four potential workers could not find a job. More recently, in 1982 and 1983, the unemployment rate averaged almost 10 percent.

The nation's commitment to high employment has twice been written into law. With the memory of the Great Depression still fresh, Congress passed the *Employment Act of 1946*, which required the federal government to "promote maximum

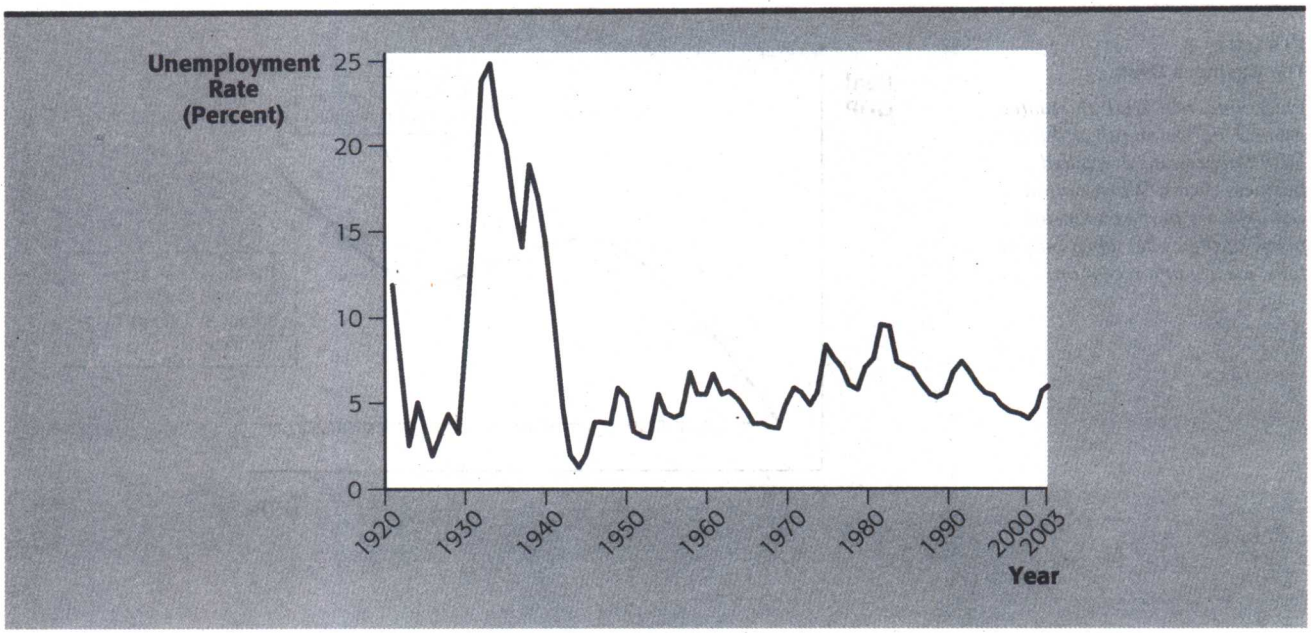


FIGURE 2
U.S. Unemployment Rate, 1920–2003

The unemployment rate fluctuates over time. During the Great Depression of the 1930s, unemployment was extremely high, reaching 25 percent in 1933. In the early 1980s, the rate averaged 10 percent. And during the 1990s, it fell rapidly, reaching 4 percent before turning up in the early 2000s.

employment, production, and purchasing power." It did not, however, dictate a target rate of unemployment the government should aim for. A numerical target was added in 1978, when Congress passed the *Full Employment and Balanced Growth Act,* which called for an unemployment rate of 4 percent.

A glance at Figure 2 shows how seldom we have hit this target over the last few decades. In fact, we did not hit it at all through the 1970s and 1980s. But in the 1990s, we came closer and closer and finally, in December 1999, we reached the 4 percent target for the first time since the 1960s. In 2001, the unemployment rate began to creep up again, and continued rising through the first half of 2003, when it averaged 6.0 percent.

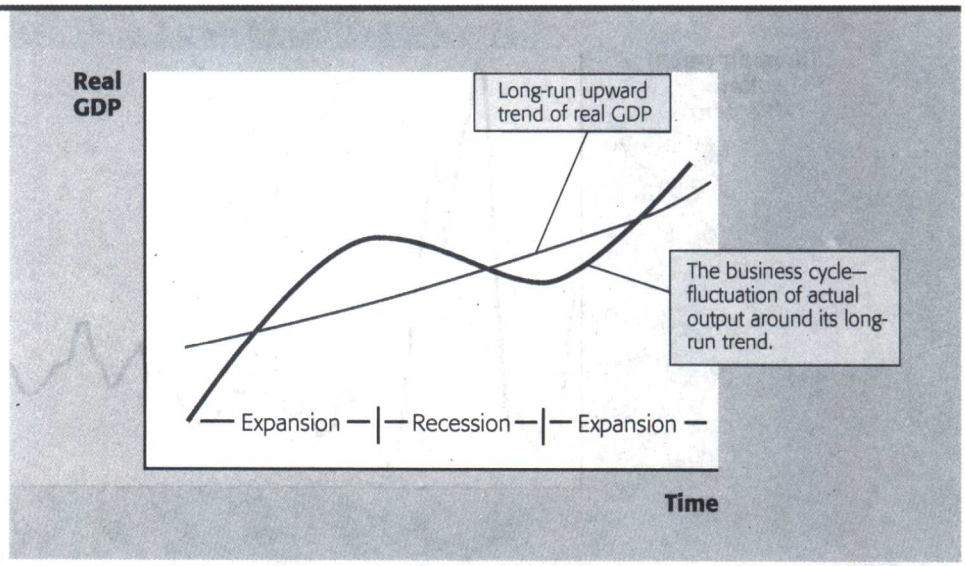
Why has the unemployment rate been above its target so often? Why were we able to reach the target at the end of the 1990s, but not maintain it through the early 2000s? And what causes the average unemployment rate to fluctuate from year to year, as shown in Figure 2? These are all questions that your study of macroeconomics will help you answer.

Employment and the Business Cycle. When firms produce more output, they hire more workers; when they produce less output, they tend to lay off workers. We would thus expect real GDP and employment to be closely related, and indeed they are. In recent years, each 1 percent drop in output has been associated with the loss of about half a million jobs. Consistently high employment, then, requires a high, stable level of output. Unfortunately, output has *not* been very stable. If you look back at Figure 1, you will see that while real GDP has climbed upward over time, it has been a bumpy ride. The periodic fluctuations in GDP—the bumps in the figure—are called **business cycles.**

Figure 3 shows a close-up view of a hypothetical business cycle. First, notice the thin upward-sloping line. This shows the long-run upward trend of real GDP, which

Business cycles 经济周期 真实 GDP 围绕着它的长期增长趋势的波动。

FIGURE 3
The Business Cycle
Over time, real GDP fluctuates around an overall upward trend. Such fluctuations are called business cycles. *When output rises, we are in the expansion phase of the cycle; when output falls, we are in a* recession.



DANGEROUS CURVES

Expansion Versus Economic Growth Although the terms *expansion* and *economic growth* both refer to increases in real GDP, they are not the same. *Economic growth* refers to the long-run upward trend in output over a long period of time, usually more than a decade. It is measured as the *average* annual change in output over the entire period. An *expansion* refers to a usually shorter period of time during which output increases quarter by quarter or year by year.

Here's an example of the difference: From 1973 to 1991, output increased at an *average* rate of 2.7 percent per year over the entire period. This was the rate of economic growth during the period. But during a *part* of this long period—the early 1980s—output *fell* for several quarters. This was a contraction. During another part of this long period—the mid- and late 1980s—output *rose* every quarter. This was an expansion.

Expansion 扩张 真实GDP上升的时期。

Recession 衰退 真实 GDP下降或反常的低迷时期。

Depression 萧条 一场不常见的严重衰退。

we refer to as *economic growth*. The thicker line shows the business cycle that occurs *around* the long-run trend. When output rises, we are in the **expansion** phase of the cycle; when output falls, we are in the *contraction* or **recession** phase. (Officially, a recession is a contraction considered significant —in terms of depth, breadth, and duration.)

Of course, real-world business cycles never look quite like the smooth, symmetrical cycle in Figure 3, but rather like the jagged, irregular cycles of Figure 1. Recessions can be severe or mild, and they can last several years or less than a single year. When a recession is particularly severe and long lasting, it is called a **depression.** In the 20th century, the United States experienced just one decline in output serious enough to be considered a depression—the worldwide *Great Depression* of the 1930s. From 1929 to 1933, the first four years of the Great Depression, U.S. output dropped by more than 25 percent.

But even during more normal times, the economy has gone through many recessions. Since 1959, we have suffered through two severe recessions (in 1974–75 and 1981–82) and several less severe ones, such as the recession from March to November of 2001.

Why are there business cycles? Is there anything we can do to prevent recessions from occurring, or at least make them milder and shorter? And why—even after a period of severe depression as in the 1930s—does the economy eventually move back toward its long-run growth trend? These are all questions that macroeconomics helps us answer.

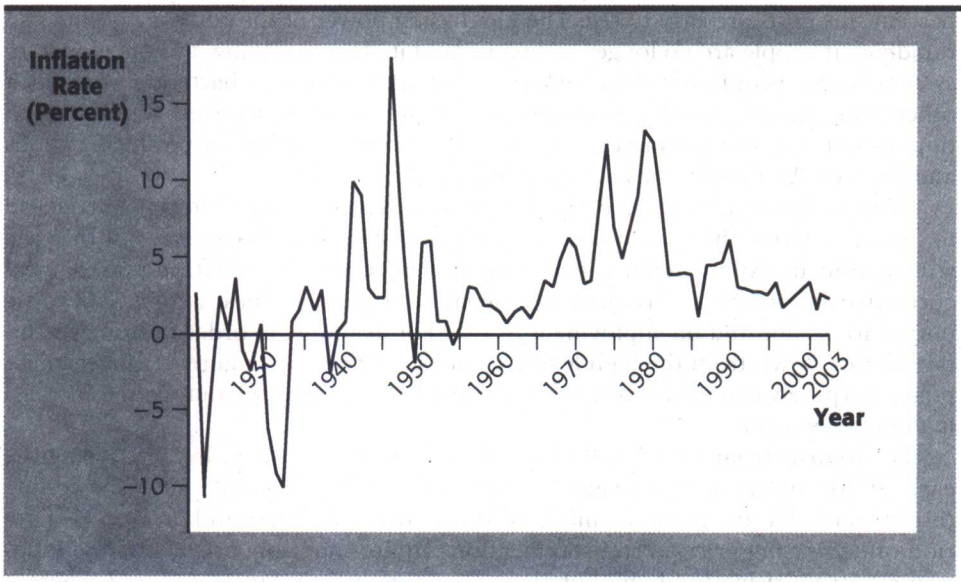


FIGURE 4
U.S. Annual Inflation Rate, 1922–2003

In most years, the inflation rate has been positive. The overall price level increased during those years.

Stable Prices

Figure 4 shows the annual inflation rate—the percentage increase in the average level of prices—from 1922 to 2003.[1] With very few exceptions, the inflation rate has been positive: On average, prices have risen in each of those years. But notice the wide variations in inflation. In 1979 and 1980, we had double-digit inflation: Prices rose by more than 12 percent in both years. During that time, polls showed that people were more concerned about inflation than any other national problem—more than unemployment, crime, poverty, pollution, or anything else. During the 1990s, the inflation rate averaged less than 3 percent per year, and it has averaged about 2½ percent during the early 2000s (through June 2003). As a result, we hardly seem to notice it at all. Pollsters no longer include "rising prices" as a category when asking about the most important problems facing the country.

Other countries have not been so lucky. In the 1980s, several Latin American nations experienced inflation rates of thousands of percent per year. In the early 1990s, some of the newly emerging nations of Central Europe and the former Soviet Union suffered annual inflation rates in the triple digits. An extreme case was the new nation of Serbia, where prices rose by 1,880 percent in the single month of August 1993. If prices had continued to rise at that rate all year, the annual inflation rate would have been 363,000,000,000,000,000 percent.

Why are stable prices—a low inflation rate—an important macroeconomic goal? Because inflation is *costly* to society. With annual inflation rates in the thousands of

[1] Figure 4 is based on the Consumer Price Index, the most popular measure of the price level, as well as historical estimates of what this index *would* have been in the early part of the 20th century, before the index existed. We'll discuss the Consumer Price Index and other measures of inflation in more detail in later chapters.

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Two excellent print sources for news on the U.S. and world economies are The Wall Street Journal *and* The Economist, *a British magazine.*

percent, the costs are easy to see: The purchasing power of the currency declines so rapidly that people are no longer willing to hold it. This breakdown of the monetary system forces people to waste valuable time and resources bartering with each other—for example, trading plumbing services for dentistry services. With so much time spent trying to find trading partners, there is little time left for producing goods and services. As a result, the average standard of living falls.

With inflation rates of 12 or 13 percent—such as the United States experienced in the late 1970s—the costs to society are less obvious and less severe. But they are still significant. And when it comes time to bring down the inflation rate, painful corrective actions by government are sometimes required. These actions can cause output to decline and unemployment to rise. For example, in order to bring the inflation rate down from the high levels of the late 1970s (see Figure 4), government policy purposely caused a severe recession in 1981–82, reducing output and increasing unemployment.

Economists regard *some* inflation as good for the economy. In fact, during the early 2000s, policy makers began to worry that the inflation rate might be getting *too low,* and that the economy might be threatened with a harmful *deflation*—a period of *decreasing* prices. Price stabilization requires not only preventing the inflation rate from rising too high, but also preventing it from falling too *low,* where it would be dangerously close to turning negative.

The previous paragraphs may have raised a number of questions in your mind. What causes inflation or deflation? How would a *moderately* high inflation rate of 7 or 8 percent harm society? How does a recession bring down the inflation rate, and how does the government actually *create* a recession? And why might a period of decreasing prices—which sounds so wonderful—be a threat to the economy? Your study of macroeconomics will help you answer all of these questions.

THE MACROECONOMIC APPROACH

Because you have already studied *micro*economics, you will notice much that is familiar in *macro*economics. The *basic principles of economics* play an important role in both branches of the field. But the macroeconomic approach is different from the microeconomic approach in significant ways. Most importantly, in *micro*economics, we typically apply the basic principle of *markets and equilibrium* to *one market at a time*—the market for soybeans, for neurosurgeons, or for car washes. In *macro*economics, by contrast, we want to understand how the entire economy behaves. Thus, we apply the principle of markets and equilibrium to *all markets simultaneously.* This includes not only markets for goods and services, but also markets for labor and for financial assets like stocks and bonds.

How can we possibly hope to deal with all of these markets at the same time? One way would be to build a gigantic model that included every individual market in the economy. The model would have tens of thousands of supply and demand curves, which could be used to determine tens of thousands of prices and quantities. With today's fast, powerful computers, we could, in principle, build this kind of model.

But it would not be easy. We would need to gather data on every good and service in the economy, every type of labor, every type of financial asset, and so on. As

you might guess, this would be a formidable task, requiring thousands of workers just to gather the data alone. And in the end, the model would not prove very useful. We would not learn much about the economy from it: With so many individual trees, we could not see the forest.

Moreover, the model's predictions would be highly suspect: With so much information and so many moving parts, high standards of accuracy would be difficult to maintain. Even the government of the former Soviet Union, which directed production throughout the economy until the 1990s, was unable to keep track of all the markets under its control. In a market economy, where production decisions are made by individual firms, the task would be even harder.

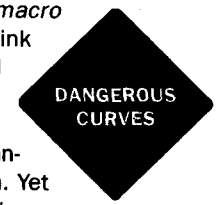
What, then, is a macroeconomist to do? The answer is a word that you will become very familiar with in the chapters to come: **aggregation,** the process of combining different things into a single category and treating them as a whole. Let's take a closer look at how aggregation is used in macroeconomics.

Aggregation 整合 把一些有差异的东西组合成一个单独类别的过程。

Aggregation in Macroeconomics

Aggregation is a basic tool of reasoning, one that you often use without being aware of it. If you say, "I applied for five jobs last month," you are aggregating five very different workplaces into the single category, *jobs*. Whenever you say, "I'm going out with my friends," you are combining several different people into a single category: people you consider *friends*.

Aggregation plays a key role in both micro- and macroeconomics. Microeconomists will speak of the market for automobiles, lumping Toyotas, Fords, BMWs, and other types of cars into a single category. But in macroeconomics, we take aggregation to the extreme. Because we want to consider the entire economy at once, and yet keep our model as simple as possible, we must aggregate all markets into the broadest possible categories. For example, we lump together all the goods and services that households buy—newspapers, pizza, couches, and personal computers—into the single category *consumption goods*. We combine all the different types of capital purchased by business firms—forklifts, factory buildings, office computers, and trucks—into the single category *investment goods*. Often we go even further, lumping consumption, investment, and all other types of goods into the single category *output* or *real GDP*. And in macroeconomics, we typically combine the thousands of different types of workers in the economy—doctors, construction workers, plumbers, college professors—into the category, *labor*. By aggregating in this way, we can create workable and reasonably accurate models that teach us a great deal about how the overall economy operates.



"Micro" Versus "Macro" In many English words, the prefix *macro* means "large" and *micro* means "small." As a result, you might think that in microeconomics, we study economic units in which small sums of money are involved, while in macroeconomics we study units involving greater sums. But this is not correct: The annual output of General Motors is considerably greater than the total annual output of many small countries, such as Estonia or Guatemala. Yet when we study the behavior of General Motors, we are practicing *microeconomics,* and when we study changes in the unemployment rate in Estonia, we are practicing *macroeconomics.* Why? Microeconomics is concerned with the behavior and interaction of *individual* firms and markets, even if they are very large; macroeconomics is concerned with the behavior of *entire economies,* even if they are very small.

MACROECONOMIC CONTROVERSIES

Macroeconomics is full of disputes and disagreements. Indeed, modern macroeconomics, which began with the publication of *The General Theory of Employment, Interest, and Money* by British economist John Maynard Keynes in 1936, originated in controversy. Keynes was taking on the conventional wisdom of his time, *classical economics,* which held that the macroeconomy worked very well on its own, and the best policy for the government to follow was *laissez faire*—"leave it alone." As he was working on *The General Theory,* Keynes wrote to his friend, the playwright George Bernard Shaw, "I believe myself to be writing a book on economic theory which will largely revolutionize—not, I suppose, at once but in the course of the next ten years—the way the world thinks about economic problems."

Keynes's prediction was on the money. After the publication of his book, economists argued about its merits, but 10 years later, the majority of the profession had been won over: they had become Keynesians. This new school of thought held that the economy does *not* do well on its own (one needed only to look at the Great Depression for evidence) and requires continual guidance from an activist and well-intentioned government.

From the late 1940s until the early 1960s, events seemed to prove the Keynesians correct. Then, beginning in the 1960s, several distinguished economists began to challenge Keynesian ideas. Their counterrevolutionary views, which in many ways mirrored those of the classical economists, were strengthened by events in the 1970s, when the economy's behavior began to contradict some Keynesian ideas. Today, much of this disagreement has been resolved and a modern consensus—incorporating both Keynsian and classical ideas—has emerged. But there are still controversies.

Consider, for example, the controversy over the Bush administration's $350 billion 10-year tax cut. In May 2003, the tax cut was approved by 231 to 200 in the House of Representatives, and passed the Senate only when Vice President Cheney cast his vote to break a 50–50 tie. Within hours of passage, the following appeared on CNN's Web site:

> *"This is a great victory for the American people," said Senate Majority Leader Bill Frist, R-Tennessee. "The wonderful thing is it really boils down to greater job security for people."*
>
> *"This is a policy of debt, deficits, and decline," said Sen. Kent Conrad, D-North Dakota, adding, "This is a scandal in the making. We're going to read there are perverse results as a result of this tax policy."*[2]

Similar opposing views were expressed by economists associated with the Bush administration on the one hand, and those associated with the Democratic Party on the other. What are we to make of macroeconomic policy controversies like these, which occur so often on the political scene?

Remember the distinction between *positive (what is)* and *normative (what should be)*? Some of these disagreements are *positive* in nature. While economists and policy makers often agree on the broad outlines of how the macroeconomy works, they may disagree on some of the details. For example, they may disagree about the economy's current direction or momentum, or the relative effectiveness of

[2] "Congress Approves Tax-Cut Package," CNN.com/Inside Politics, May, 23, 2002.

different policies in altering the economy's course. Indeed, the two opposing senators quoted above were expressing a positive disagreement: a disagreement about the *impact* that tax cuts would have on the economy.

But disagreements that *sound* postive often have *normative* origins. For example in 2003, Democrats in Congress criticized the Bush tax cut as unfair, because it gave the biggest tax reduction to those with the highest incomes. Republicans in Congress countered that the tax cut was fair, because taxpayers with the highest incomes paid higher taxes to begin with. In the competitive and confrontational arena of politics—with each side trying to muster all the arguments it can—positive economics is often enlisted. In 2003, Republicans who began with the view that the Bush tax cut was fair invariably *also* argued that it was the most effective policy to spur the economy into a healthy expansion phase (see Figure 3). And they found a number of economists—who may have had similar normative views—to support that argument. Democrats who began with the view that the tax cut was *un*fair invariably *also* argued that it would cause great harm to the economy. And they found a number of economists—who may have had similar normative views—to support *that* argument.

Because of such political battles, people who follow the news often think that there is little agreement among economists about how the macroeconomy works. In fact, the profession has come to a consensus on many basic principles, and we will stress these as we go. And even when there are disagreements, there is surprising consensus on the approach that should be taken to resolve them.

You won't find this consensus expressed in a hot political debate. But you *will* find it in academic journals and conferences, and in reports issued by certain nonpartisan research organizations or government agencies. And—we hope—you will find it in the chapters to come.

Summary

Macroeconomics is the study of the economy as a whole. It deals with issues such as economic growth, unemployment, inflation, and government policies that might influence the overall level of economic activity.

Economists generally agree about the importance of three main macroeconomic goals. The first of these is economic growth. If output, real gross domestic product, grows faster than population, the average person can enjoy an improved standard of living.

High employment is another important goal. In the United States and other market economies, the main source of household incomes is labor earnings. When unemployment is high, many people are without jobs and must cut back their purchases of goods and services.

The third macroeconomic goal is stable prices. This goal is important because inflation imposes costs on society. Keeping the rate of inflation low helps to reduce these costs.

Because an economy like that of the United States is so large and complex, the models we use to analyze the economy must be highly aggregated. For example, we will lump together millions of different goods to create an aggregate called "output" and combine all their prices into a single "price index."

Key Terms

Aggregation
Business cycle
Depression
Economic growth
Expansion
Recession