Macroeconomics: an Introduction

Chapter 1

An Overview of Economics

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Outline

Preview

1.1 What are "the Economy" and "Economics"?
The Standard of Living
Income Inequality
The Productivity of Labor
Economic Growth

1.2 The Four Sectors of the Economy
Business
Households
Government
The Rest-of-the-World

1.3 What is Microeconomics?

1.4 What is Macroeconomics?
Credit Crisis of 2008 and Recession Now!
The Twin Deficits: International Trade and the Federal Budget.
The Challenge of Globalization
Social Security and Medicare; Will They Impoverish the Young?
Will We Have Inflation, Recession, or Both?

Preview

Economics is one of the oldest and most influential of intellectual disciplines. Practically all of the great thinkers, from Aristotle to Einstein, have tried their hand at it, and the great economists like Adam Smith, Thomas Malthus, David Ricardo, John Maynard Keynes and Milton Friedman rank among the most influential minds in our history. The economic paradigm permeates our thinking about practically every area of human activity. Military analysts talk in terms of "assets" and "trade-offs" while theologians quote economic statistics. Adam Smith's ideas about competition had a strong influence on Charles Darwin's study of biology. Insect colonies are said to "invest" in nest building. Our thinking about politics and social behavior draws heavily on ideas about incentives, trading, and maximization that come from economics.

The word *economics* comes from ancient Greece (like so many words and important ideas) when an "economist" was the manager of an estate. Those very practical economists grappled with all the basic problems of economic decision-making facing a modern executive today. What is the optimal mix of crops? How much to invest in new equipment? or irrigation instead? Should we sell our grain now, or wait until prices improve? Modern economics returns the compliment by providing the foundations of business administration today. Successful executives have often told the author that the principles they draw on every day in making decisions are those that they learned in their first courses in economics. Good reason to "invest" in learning the foundations of economic analysis!

1.1 What are the "Economy" and "Economics"?

Every society must provide goods and services for the welfare of its citizens. The economy consists of all of the activities involved in the production and distribution of these goods and services.

Economics, as the study of the economy, seeks to address three basic questions:

- **Are there fundamental principles that help us understand how the economy works?**

- **How well does the economy perform in achieving social objectives?**

- **How would changes in laws or political institutions affect the performance of the economy?**

The production and distribution of goods and services requires the use of economic resources called **factors of production.** They may be thought of as falling into one of four categories:

- **Land**

  This includes not only territory but all of the natural resources, such as minerals and fossil fuels, which the economy is endowed with.

- **Labor**

  This refers to the services of human beings who bring not only their time and effort to the economy but also their skills.

- **Capital**

  This consists of the human-made tools used in the economy: machinery, computers, buildings, vehicles, and transportation systems. These tools of production are called **capital goods**.

- **Entrepreneurship**

  This is the bringing together of land, labor, and capital into productive units. For example, when Henry Ford organized the mass production of automobiles early in this century, he brought labor and capital together in a new way on an assembly line, bringing the cost of an automobile down to within the reach of the average American. Bill Gates recognized the potential of the personal computer when most thought it was simply a hobby toy, and the result is one of the most valuable companies in the world today, and one of the most important industries of our time.

How do we measure the success of an economy? By the *standard of living* that it delivers.

The Standard of Living

By the **standard of living** we mean not only the goods and services we consume, but also other aspects of the quality of life including health, leisure time, and environmental amenities. **Welfare** is another word that also conveys the idea of well-being. But it is not easy to measure the standard of living of a population in quantitative terms. We care not just about the quantity of goods and services but also their quality, and that can be difficult to measure. Think of the remarkable improvements in the quality of electronic devices, and in the effectiveness and safety of medical services; but how to quantify that? We also are to measure changes in the amount of leisure time, and the historical trend is towards more leisure. While the work-week has remained around 40 hours in the U.S. in Europe it is considerably less than that and vacations are also much longer there. These differences have to be taken into account in making standard of living comparisons between the two.

The environment gets increasing attention as we become more aware of the negative effects of our activities on nature and how that affects our own welfare. Affluent societies have both the greatest impact on the environment and also the greatest ability to mitigate that impact. It is very difficult to measure environmental impact, nor is it easy to get agreement on how it should be valued, but there is no doubt that it will occupy increasing attention in the years ahead.

Income Inequality

In measuring the standard of living we are concerned not simply with the average level of consumption or income, but also its distribution among households. Which society enjoys a higher standard of living, one with a higher average income but greater inequality, or one with a lower average income but less inequality? The answer is ultimately a value-based judgement, but most people would probably say that there is a trade-off between level and inequality, so the answer depends on how large the differences are. In recent years there has been considerable discussion about the effect of the economic boom of the past 20 years on income distribution; the share of total income going to the highest income groups increased dramatically. Evidently, the boom raised both the average income and the inequality of distribution. Is it better to have a higher average even if it means greater inequality? Your answer might depend on whether the greater inequality is only temporary, related to the now-faded financial boom, or is it a long term trend? An economy with extremely unequal household consumption levels cannot be considered completely successful, but we do not expect a successful economy to produce exact equality either.

The Productivity of Labor

Clearly, our standard of living depends on our opportunities to consume, and that depends on our ability to produce. The **productivity of labor** is the amount of goods and services produced per hour of labor input. Higher productivity makes possible a higher standard of living because it allows society to increase the consumption of goods and services, or leisure, or environmental quality, or all three.

The productivity of labor is determined by the amount of land and capital available per worker, the level of technology embodied in that capital, the skills of the workers who use it, and the creativity of its entrepreneurs. Productivity can be increased by producing more capital goods, by advancing technology through research and development, and by improving skills through education and training. Affluent societies are notable for the quantity, quality, and technological advancement of their capital goods and for the high level of skills and education of their citizens. In contrast, poor societies are marked by the paucity of both capital and skills.

Economic Growth

The process of **economic growth**, a continuing increase in the standard of living that persists over decades, can only come from growth in the productivity of labor. An increase in the standard of living requires, in turn, that a society devote a portion of its economic output to research and development of new technologies, to education and training of workers, and to the production of new capital goods. This can only happen if society is willing to forgo some immediate consumption of goods and services, freeing a portion of the current output of the economy for investment in future growth. It is for this reason that the very low savings rate in the U.S. has been a matter of concern for our future welfare.

Exercises 1.1

A. Discuss the extent to which society can change each of the four factors of production. Give some examples.

B. Education is sometimes referred to as "human capital." In what sense is education like capital goods?

C. Compare briefly the standard of living in Switzerland and in India. Trace the difference to the productivity of labor, and hence to differences in the quantity and quality of the factors of production present in the two countries. Alternatively, pick two contrasting countries of your choice.

D. What are some options that a country has if it wishes to raise its standard of living? Can we say that people are happier in a country with a higher standard of living?

1.2 The Four Sectors of the Economy

Modern complex economies involve the interactions of large numbers of people and organizations. These *economic agents* fall into one of three categories: *business*, *households*, *government*, and the *rest-of-the-world*. Economists find it useful to think of these groupings as *sectors* of the economy. Let's look at each of these sectors in turn:

Business

The business sector is where production takes place in the economy. The individual agents making up the business sector are called firms. These are the organizations within which entrepreneurship brings together land, labor and capital for the production of goods or services. Economies in which firms are generally owned by private individuals rather than by governments are called *capitalist* or *private enterprise* economies. These include almost all the countries in the world today.

A firm may be as small as one individual. An example is a plumber with a truck and tools whose income is whatever is left over from sales after paying expenses. These one-owner firms are called individual proprietorships. A large firm is typically a corporation which is a legal entity in itself, having many of the same rights and privileges under law as does a person. The corporation purchases factors of production and receives payment from buyers of its output. The difference between its sales revenue and its costs of production is its *profit* or *earnings*. A corporation purchases capital goods, plant and equipment, from earning profits, borrowing from lenders, and selling shares in the ownership of the corporation. The latter is called stock.

The owners of a corporation are called *shareholders*. A large firm typically has many shareholders, some of which are other firms. Firms which primarily invest in other firms are called financial intermediaries. Shareholders play no direct role in the running of the firm, rather they are represented by a board of directors who are elected by shareholders on a one vote per share basis. Shareholders are not liable, in general, for the debts of the corporation. The term "Ltd." used in the names of corporations in Britain refers to the limited liability of the shareholders.

The entrepreneurial input to the corporation is often provided by salaried managers who may not even be shareholders. These managers are appointed by the directors as officers of the corporation who are then legally empowered to conduct its business. A primary responsibility of the directors of a corporation is the hiring and oversight of the officers.

Households

Those are us, the family units that make up society. We consume the goods and services produced by the economy. It is for our benefit that the economy exists.

The household sector provides the labor used in production, receiving payment of wages and salaries in return. Households also provide financial capital to the business sector which includes loans to firms, direct ownership, or the purchase of shares. Households may invest directly in firms by purchasing their stock or bonds, but more typically households invest indirectly through financial intermediaries such as pension funds, insurance companies, banks, and mutual funds.

Households own the firms and have claim to all the income produced by the business sector, including wages, interest, and profits.

Government

We can think of government as having four basic economic functions:

First, it establishes the legal framework within which the economy operates. Economists sometimes refer to this framework as the *rules of the game*. A complex body of commercial law clarifies relations between buyers and sellers, employers and employees, and parties involved in private contracts.

The corporation, an essential building block of modern economies, is a creation of the law. It was the development of the *limited liability* *corporation* in Britain during the industrial revolution that made possible the formation of very large firms co-owned by many individuals. Such enterprises could not exist without the assurance that individual shareholders are not personally liable for the actions of the corporation.

Property rights are not unconditional but rather are defined by laws which establish the privileges, obligations, and limitations of ownership. For example, city government decides what the owner of a city lot can and cannot do with it. The owner of a residence is entitled to live in it, rent it to someone else to live in, or sell it, but usually is prevented by zoning laws from tearing down the house and putting in a fast food restaurant or a rifle range. Regulations control entry into certain economic activities such as banking or medicine, restrict what firms can say in their ads, and even prohibit sale of goods deemed not in the public interest.

Second, taxes are collected by government from households and firms. The U.S. federal government collects most of its revenue from individual income taxes. It also taxes corporate profits and estates, levies excise taxes on the value of certain goods and tariffs on imports from abroad, and it collects payroll taxes. State governments collect sales taxes on retail purchases and/or income taxes on both individuals and corporations. County and municipal governments levy a tax on the value of real estate property, and often also participate in sales tax or income tax revenues.

What activities are taxed, and how heavily, gives government many levers with which to encourage or discourage specific economic activities. The tax on gasoline is cents per gallon in the U.S. and dollars per gallon in Europe. The high cost of fuel creates an incentive that results in cars in Europe being much smaller and less powerful than in the U.S. and less driving. This has far reaching effects on the environment and the greater use of public transportation.

Third, government spends some of these tax revenues to provide goods and services through agencies that operate much like firms, for example the National Park Service which produces recreation and the U.S. Navy which produces national defense. These firms are engaged in the production of **public goods**, ones we consume as a society rather than as individuals. The prime example is national defense which cannot be provided to one individual without providing it to others. Some goods have both private and public dimensions. For example, education benefits not only the individual who is educated but society as a whole, so it is not surprising that government plays a large but not exclusive role in education.

In socialist economies, government operates a wider range of firms. In the former Soviet Union, all firms were under government ownership. Advocates of socialism contended that government ownership would lead to greater welfare, claiming that government is more responsive to the needs of society, and kinder to employees, than the market. These ideas were very popular in Europe following World War II, and large sectors of those economies were "nationalized" under government ownership or control. The wave of "privatization" of industry in Europe after the failure of the Soviet Union reflected the realization that socialism failed to deliver on those rosy promises. The influence of socialist ideas is evident today in the major role of the governments in most industrialized countries in basic health care and a “safety net” of income support programs.

The allocation of government spending among alternatives also influences how firms and households allocate their private resources. For example, police protection is thought of as a public good, but the level of police protection will affect whether the Jones family installs a burglar alarm. And whether government builds freeways or subways affects private choices among alternative forms of transportation.

Fourth, government also makes **transfer payments** to those who are entitled to receive them under the law. For example, people qualify to receive Social Security benefits on the basis of age or disability. Farm subsidies are paid by the U.S. government to firms which qualify by engaging in certain farming activities.

Transfer payments redistribute income among groups in society, and are a larger part of the total expenditures of the federal government than is the purchase of goods and services including defense. The distribution of income between the young and the old in the U.S. has been substantially altered by the growth in Social Security benefits received primarily by the elderly and the corresponding increase in Social Security taxes paid primarily by the young. Transfer payments also affect private decisions. For example, the increase in the number of people choosing earlier retirement is surely related to the increase in the level of Social Security benefits as well as the penalties which the rules put on continued work by those qualifying for old age benefits.

We tend to focus on the federal government in thinking about the role of government in the economy, but state and local governments also play important roles in all four functions of government. Economists refer to governments at all levels as the **public sector**.

The Rest-of-the-World

We naturally focus on the economy of our nation because government plays an important role in economic life and because economic interactions are usually concentrated within political borders. However, the movement of goods and services as well as factors of productions across national borders is also an important aspect of economic activity. U.S. households consume stereos made in Asia and US firms purchase machine tools produced in Europe. Foreign airlines fly airplanes made in the U.S. and serve their passengers food exported from the U.S. International trade now comprises about 10% of our national economy and is growing rapidly. Growth in trade has been accelerated by the removal of barriers under the North American Free Trade Agreement

(NAFTA), and the 1994 round of the General Agreement on Trade and Tariffs (GATT) lowered barriers to trade around the world.

Think of the Rest-of-the-World, or **ROW**, as a fourth sector of the economy. In addition to trading with the ROW, American firms, government, and households also borrow from the ROW and lend to it. Japanese, Chinese, and European investors are major lenders to both firms and government in the U.S., while American firms and households also have made large investments in Europe and Asia.

Exercises 1.2

A. Indicate which of the four factors of production each of the following is an example of: 1) a Macintosh™ computer, 2) an electronics engineer, 3) a Boeing 767™, 4) crude petroleum, 5) the Empire State Building, 6) the lot it sits on, 7) Bill Gates, 8) college graduates.

B. Name one or more prominent entrepreneur of today and explain briefly what this person has done.

C. Categorize the following by economic sector: 1) the Hernandez family, 2) the Ford Motor Company, 3) the State of California, 4) the University of California, 5) the Durn-Good Grocery, 6) Toyota Motors, Ltd.

D. Which of the functions of government in the economy is represented by the following: 1) Aid to Families of Dependent Children, 2) the Federal Aviation Administration, 3) truth-in-advertising laws, 4) state sales tax, 5) the Washington State Ferry System, 6) Small Claims Court.

E. Russia attempted to convert from a centrally planned economy under Soviet Communism to a largely private enterprise economy. What basic function of government in a private enterprise economy was lacking in Soviet Russia and was needed before a private enterprise economy could function? Has the conversion succeeded? Why?

1.3 What is Microeconomics?

It is already apparent from this brief overview that the subject of economics is a very broad one. Just as the study of the physical world is divided into fields such as physics and chemistry, economics is likewise divided into fields comprised of closely related topics. The two major fields of economics are *micro* economics and *macro* economics. Since the second is the subject of this book, let's take a minute to review what microeconomics is about.

Microeconomics is the study of how markets function. For example, how do the prices of airline tickets and the frequency of service to various airports get determined in the US economy? An airline decides whether to raise or lower fares, whether to add a flights between LA and Chicago, and whether to put a new 747 in service on the San Francisco to Honolulu route. Travelers respond by buying more or fewer trips. The airline's objective is to maximize profits, constrained by the rules of the game established and enforced by government. Travelers, in turn, hope to buy transportation at the lowest possible price with the best possible convenience and comfort.

The diffuse but very real arena in which such firms and their customers interact is called the marketplace. Physically, the marketplace for airline tickets is all the ticket counters and travel agencies where transactions take place. Conceptually, the market encompasses all the interactions between the economic agents that produce and consume air travel.

Prior to the late 1970's the prices of airline tickets, as well as the routes and airline could fly, were set by the federal government as a part of the regulation of air travel. Largely due to the urging of economists, the airline ticket market was deregulated so that airlines are now free to raise or lower fares and alter service to airports as they see it to be to their advantage to do so. Advocates of deregulation contended that freeing the air travel market would result in a more efficient allocation of resources within the airline industry, making society as a whole better off. The term "resources" here means the factors of production, not just natural resources. The analysis of airline deregulation, the arguments for and against it, as well appraising its success or failure to date, are interesting and important problems in microeconomics.

In private enterprise economies it is primarily in the marketplace that the three fundamental economic decisions are made:

1. **What will be produced?**
2. **How will it be produced?**
3. **Who will consume it?**

For example, it is in the marketplace that society decides how many tennis rackets will be produced, whether they will be made in Ohio or in Taiwan, and which consumers will buy them.

It was the remarkable insight of Adam Smith, pondering the workings of the British economy two centuries ago, that products and services are provided for the benefit of society mainly as a result of the pursuit of self interest by producers and consumers interacting in the marketplace rather than because of their good intentions. Producers who supply what consumers demand are rewarded with higher profits, while those who do not are punished for wasting society's valuable land, labor and capital resources by suffering losses. In a famous passage in his book *The Wealth of Nations*, Smith wrote:

"It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest."

Adam Smith realized that the market provides incentives for agents to behave in ways that generally improve economic welfare.

Microeconomists are also interested in studying ways in which markets fail to provide the proper incentives to allocate resources. This happens when an economic activity produces consequences for agents that are not a party to that activity. An example of such an *externality* is the air pollution. Unless there is a way to make agents pay for producing pollutants, they will tend to produce more of it than is good for society. The design and cost-effectiveness of taxes and regulations to mitigate externalities is an important issue in microeconomics.

A supplement entitled *Review of the Principles of Microeconomics* offers an introduction for students who have not encountered 'Micro" before and for those who have taken a prior course but wish to get a firmer grasp of basic microeconomic principles, particularly those that will be used in this book.

Exercises 1.3

A. What are the three fundamental decisions that have to be made in any economic system? Discuss what those decisions are in the context of trips between San Francisco and Hong Kong. How has technology changed the outcomes of those decisions during the last half century?

B. Express in your own words Adam Smith's idea of what makes a private enterprise economy work.

C. Federal law requires that electric generating stations install scrubbers on their exhaust stacks to reduce emissions of certain compounds. Discuss why utilities might not install these scrubbers on their own, and how you might approach the question of whether such scrubbers should be required by law.

1.4 What is Macroeconomics?

Macroeconomics focuses on trying to understand events that affect the whole economy. In the fall of 2000 and continuing through the fall of 2001 there was the U.S. experienced a decline in sales, production, and employment that affected most firms and industries. A few industries, notably housing construction, continued to do well. This kind of wide-spread decline in economic activity, when it lasts for more than six months, is called a *recession*.

Since recessions are felt throughout the economy, it seems unlikely that the explanation for a recession will be found in the microeconomics of individual markets. The causes of recession must involve forces that have widespread influence on economic activity. Nor are these events confined to just one economy; recent U.S. recessions have put a damper on economic activity around the globe – a symptom of *globalization*.

What causes recessions? Should the government do something about it? If so, what can it do? What forces bring a recession to an end, allowing resumption of normal levels of sales, employment and production?

Here is another example of a problem in macroeconomics. In the late 1970s the price of practically every good and service in the US economy rose very rapidly, at a rate of about 15% per year. A pervasive and persistent rise in prices is called *inflation*. Since inflation reflects price changes that are widespread across many different industries it seems clear that the explanation for inflation must lie with factors affecting the entire economy. In recent years inflation has not been a major problem in the U.S. economy, but 2006 saw a modest revival that has some economists concerned. Why did inflation get out of control in the late 1970s, and what should be done if it speeds up again?

Recession and inflation are central problems in macroeconomics.

The division of economics between microeconomics and macroeconomics is not a precise one, and the analytic tools of each are important in understanding the other. For example, the computer industry is of growing importance to the economy, but the study of the economics of that industry belongs in the domain of microeconomics. On the other hand, although banking is also an industry, its influence on the economy is so pervasive that the study of banking is usually considered part of macroeconomics. Nevertheless, the macroeconomist studying banking will make use of the analytical tools of microeconomics, and the microeconomist studying the computer industry will be concerned with the impact on the industry of macroeconomic events such as recession and inflation.

The topics which economists usually group under the heading of macroeconomics include the following:

- **The Measurement of National Income**
- **The Relationship Between Savings and Investment**
- **The Cost of Living and Inflation**
- **Interest Rates and What Influences Them**
- **Recession, Unemployment, and Economic Growth**
- **Money and Banks**
- **The Federal Reserve System and Monetary Policy**
- **Government Taxation, Spending, and Fiscal Policy**

- **International Trade and Exchange Rates**

Macroeconomic issues are the subject of major news coverage by the media because they affect all of us. They are usually the most hotly debated issues of Presidential campaigns. Candidate Bill Clinton’s mantra was: "It's the economy, stupid!" Here are some of the major macroeconomic issues that are receiving a lot of attention:

The Financial Crisis of 2008 and Recession Now.

Bank failures, collapse of old and storied Wall Street investment firms, astronomical losses in hedge funds, falling house prices, rapidly rising lay-offs, and unsold goods of all kinds – that is the economic reality of 2008! At this writing it is clear that we have entered one of the most severe recessions since the Great Depression of the 1930s, and the future looks shaky indeed. The change of administrations and a Congress that seems unable to act decisively add to the feeling of unease.

How could major banks, household name brands that were solid and expanding only a year ago, suddenly experience unsustainable depositor withdrawals? Why has the price of houses fallen around 20% in one year, after decades of almost relentless increase? How could the stock market lose about 40% of its value in only several months? These are among the troubling and far from resolved questions we will try to grapple with!

The Twin Deficits: International Trade and the Federal Budget.

When the amount we earn from exports falls short of the amount we spend on imports then there is a *trade deficit*. In 1980 the value of goods exported by the US was $25 billion less than the value of the goods we imported. By 1990 the US trade deficit had swollen to $80 billion. And currently it is around $400 billion! That is about one billion dollars every day. This seemingly relentless widening of the trade deficit to an astonishing level is a source of concern to many, and yet its causes and consequences may be far different from what most imagine.

The amount by which federal spending exceeds tax revenues is called the *federal budget deficit*. In 1980 the federal government spent $74 billion more than it collected in taxes. By 1990 the federal deficit had widened to $220 billion. The prospect of continuing budget deficits motivated a major tax increase by the Clinton administration in 1993. That, combined with a long and vigorous economic expansion eliminated the budget deficit at the end of the 1990s, and President George W. Bush successfully lobbied congress for a tax cut. But the budget is again falling into deficit, $400+ billion for 2008!

Could there be a connection between these “twin” deficits? Both emerged alarmingly in the 1980s. Is the similarity in their timing and size coincidental? Are they harmful to the economy? What caused them, and are their causes related? What should we do about them, if anything?

The Challenge of Globalization

After World War II, US business faced little competition from abroad. Germany and Japan were struggling to rebuild and Great Britain was in the process of losing its empire. The only imported car of note in the 1950s was the VW beetle, admired for its simplicity and eccentricity, but no real threat to US competitors. General Motors was the largest industrial corporation in the world and it could claim with some authority that its Cadillac™ brand was "The Standard of the World." How things have changed!

By the late 1980s US industry faced strong competition from Europe and Japan in many fields. Japan particularly had become an economic powerhouse. In 1989 the biggest selling car in America was for the first time not made by an American company. It was the Honda Accord. Nippon Telephone and Telegraph was larger (in market value) than all US corporations except Exxon. The seven largest banks in the world were all Japanese! The five largest securities firms (dealing in stocks and bonds) were also all Japanese. In 1987 Japan became the world's richest nation with assets worth $44 trillion. The US was spending about $50 billion more on imports from Japan each year than it earned from sales to Japan. Japan invested these trade surplus dollars in the U.S., much in the form of direct investment in the U.S. based subsidiaries of Japanese corporations. Japanese investors also became major owners of real estate and stocks and bonds in the U.S.

Then in the 1990s, Japan's stock market took a severe tumble and its economy entered a decade of stagnation. Meanwhile, U.S. economic growth was strong, and American firms emerged as the leaders in the new technologies of personal computers and telecommunications. In part because of technological advance, competition is now on a global scale. Nokia, the Finnish maker of mobile phones came out of nowhere to become a leader in its field and among the 30 most valuable corporations in the world. Nor is competition limited to manufacturing. Of the ten largest banks in the world, only one is American. The largest is Deutsche Bank (with assets equivalent to $700 *billion*) followed by a Swiss and a Japanese bank in the next two positions. All of these banks have global reach, offer a full range of financial services, and make use of the latest telecommunications to knit their world-wide operations together.

In this new century China has emerged as the new player in the international economy, with rapidly rising exports of manufactured products, selling far more to the U.S. than it buys. Thus, China has billions of dollars to invest in the U.S. and it has become a major purchaser of bonds issued by the U.S. Treasury to finance the federal budget deficit. The influx of low cost goods from China has been a factor in holding down inflation in the U.S. and allowing Americans to consume more. While we no longer make as many toasters, small appliances are typically produced now in China, that country is a rich market for high value products we do make such as airliners. Meanwhile, India is undergoing a somewhat similar transformation and even exports services to the U.S. in the form of telephone help lines that make use of Indians' command of the English language and high level of technical training.

What should be our response to globalization? Do we have any choice but to participate? Or should we try to limit our exposure to international competition and foreign ownership in the U.S.? Public sentiment was once strong for Congress to take action to protect U.S. industry from Japanese competition, but that competition proved to be the stimulus for a new era of change. Now our officials scold Japan that it is doing too little to encourage growth! Concern has now shifted to China and India. Some observers worry about the impact of globalization on third-world countries where economic development is happening at a dizzying pace, and on the labor market in the U.S. which now is thrown open to world competition. In this debate, economists are almost always a voice for free trade and open world markets. The issues are complex and will play an important role in debate on public policy in the decades ahead.

Social Security and Medicare; Will They Impoverish the Young?

Benefits for the aged account for 27% of federal spending but the elderly constitute only 12% of the population. The Social Security trust fund is now in surplus because the "baby-boomers," those born between 1945 and 1965) are in their peak earning years and they are a very large age cohort. But this favorable balance will be reversed as the boomer retire over the next couple of decades.

Medicare benefits for the elderly have proved to be about ten times as costly as was projected when the program started in 1965; the actual expenditure now is over $200 billion per year. The taxes that fund Social Security and Medicare are now the greatest tax burden on many lower income young families.

Should Social Security taxes be cut now to reduce the tax burden on young wage earners, or should the surplus be allowed to accumulate to cover the anticipated deficit ahead? Is the Social Security system, as it is now designed, fair to both young and old? Should Medicare benefits be broadened? Should they be subject to a minimum income requirement? These and other vexing questions will figure in public debate for coming decades.

Will We Have Inflation, Recession, or Both?

Two things that are we do not want to see in our economy are inflation and recession. Inflation seems nice at first, people see their incomes rise, their houses become more valuable, but after a while they realize that prices of things they buy have risen too. And inflation makes it hard for us to use prices to judge the value of goods and services because the 'yardstick' we are using is constantly shrinking. Recession is bad because it means few jobs, loss of income for many, and slow growth for almost all. Sometimes we are unlucky enough to have both, as in the 1970's when soaring oil prices and the cost of just about everything was accompanied by slow growth and then the 'double dip' recessions of the early 1980s. How is the U.S. economy doing in the new century?

The 1990s turned out to be a decade of sustained growth and low inflation, to say nothing of a soaring stock market powered by the 'dot-com' boom. Concern lingered that inflation would rebound rapidly if the economy continued to expand. But the Federal Reserve, known affectionately as "the Fed," was able to perform a delicate balancing act between inflation and recession and keep the economy on track through the end of the decade. One of the objectives of this book is to understand how they did that.

The boom of the late 1990's gave way in 2000 to a "bear" stock market and a mild recession, compounded by the shock of 9-11. Two of the microeconomic underpinnings of the boom, dot-com and telecom, experienced the slump that has followed revolutionary innovations of the past. New technology stimulates a frenetic pace of capital investment in new equipment and infrastructure. Stocks of companies in the new industries soar. After a while it becomes clear that the capacity that has been built is more than adequate – witness the glut of optical fiber - and the ensuing slump in investment spending leads to recession. Similar episodes were the railroad boom following the Civil War and the auto boom of the 1920's. As in the past, recession gave way to renewed economic growth, with help from the Fed in the shape of extremely low interest rates (how they control interest rates if one of the themes of this book) engineered by its legendary Chairman, Alan Greenspan.

Many hoped that recession and inflation had been banished from our world in the new millennium. The "New Economy" was a popular slogan on Wall Street and in Washington D.C. in the late 1990's. The productivity of labor was growing at an unprecedented rate, it was said, so the old rules just didn't apply any more. The Fed was would protect us from the uncertainties of economic life, so the story went.

But as we look ahead to 2007 and beyond it is clear that many uncertainties remain, and the threats of recession and inflation are far from banished from the land. Greenspan has retired, replaced by Ben Bernanke, a brilliant economist and Princeton professor who is nevertheless a rookie in Washington politics. War in Iraq is raising the federal budget deficit again and fears of more to come. Oil prices have soared, reviving a ghost of the 1970s. Economics growth has cooled down and inflation has perked up. Stagflation, a lack of economic growth combined with inflation, is a 1970s buzzword again being bandied about.

As you can see, there is no lack of macroeconomic issues to concern us! They occupy the news media every day, and provide a never-ending drama featuring all the emotions of a good soap opera: hope, fear, greed, success and failure (OK, maybe one or two emotions are missing). People are interested in macroeconomic issues precisely because they touch the lives of every one of us. Politicians understand that their chances for election hinge on peoples' perception of the health of the macroeconomy. As citizens we all need to understand as much as we can about its workings, and that understanding may well be the key factor to coping with the uncertainties and opportunities that the economy presents to each of us.

Exercises 1.4

A. Indicate whether each of the following topics falls under the umbrella of microeconomics or macroeconomics.

1) the effect of protecting the spotted owl on the price of lumber,
2) causes of the decline in inflation during the 1990's,
3) the persistent deficit in our trade with Japan,
4) effect of a proposed increase in the gas tax on demand,
5) the impact of a change in the exchange rate between the German Mark and the US dollar on employment in the US and Germany,
6) a cost-benefit analysis of federal exhaust emission standards.

B. Give brief and perhaps tentative responses to some of the macroeconomic issues discussed in this section. What are some other issues that feature prominently in the news currently? Which of these issues is of greatest importance to you? Briefly, why?

END.