Chapter 1

WHAT IS ECONOMICS?

". . . the desire of bettering our condition . . . comes with us from the womb, and never leaves till we go into the grave."

— Adam Smith
The Wealth of Nations (1776)

"Capitalism is about turning luxuries into neccesities."

— Andrew Carnegie

Ever since Adam and Eve left the Garden of Eden, human beings have worked by the sweat of their brow. For the vast majority of people living throughout recorded history, life has been a struggle characterized by hard work and problem solving. Few have enjoyed the luxury of extended leisure and material abundance.

Why do we work? Throughout history, and throughout much of the world today, we work to survive. Nature may be beautiful and inspiring, but it is also a harsh mistress. Very few of our wants and needs can be satisfied without transforming natural resources into useful goods and services. Almost everything we use or consume must be "man-made." Making raw materials useful and consumable requires a great deal of hard work, dexterity, tools, and thought.

For many people living in extremely poor countries, the alternative to work is starvation. In more advanced nations, and for some fortunate people living in poor countries, citizens work for higher incomes and a better way of life. Higher incomes improve living standards and enable people to lead more productive, enjoyable lives.

The purpose of studying economics is pretty straight forward. There are several ways to describe our economic desires:

– to improve our lot.
– to make more money.
– to increase our standard of living.
– to create wealth.
– to have more leisure time.
– to increase the quantity, quality, and variety of goods and services.

In developing countries, many poor people living on subsistence may not feel these desires. They may feel fatalistic about their future. For them, a cheerful hello or an extra loaf of bread may be the extent of their lot from day to day.

But the modern world has seen a vast increase in the material well-being of mankind. We need go back only a century to see dramatic changes in society and city life—in transportation, communications, energy, building, medicine, and entertainment. Per capita income and wages are often used by economists to measure a nation's standard of living. Figure 1.1 shows how dramatically per capita real wages (in constant dollars) have increased in the United States.

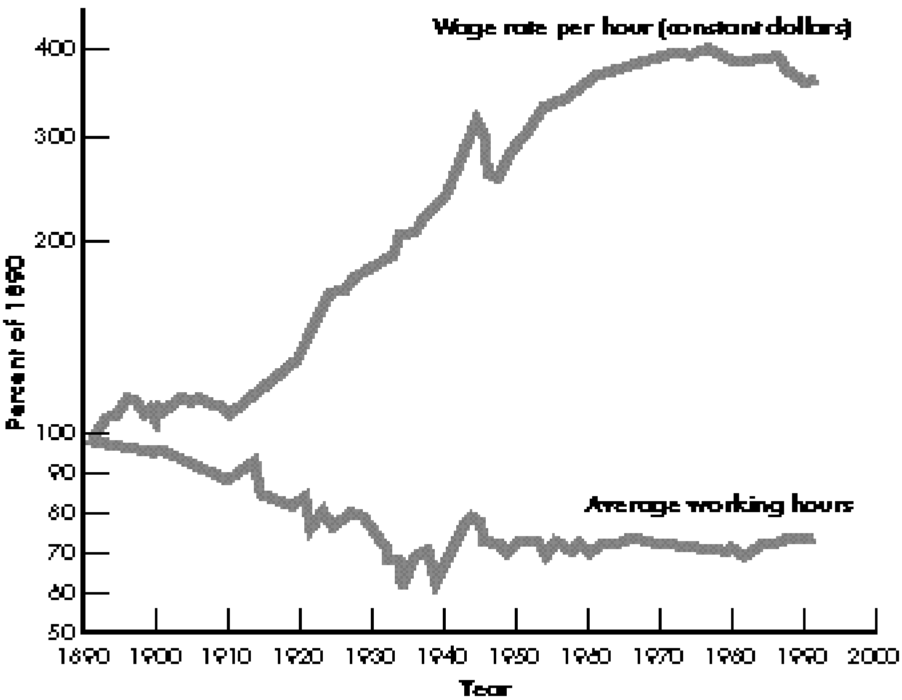

Figure 1.1 *Real wages (excluding company benefits) have dramatically improved during the 20th century as hours of work per week have declined.*

However, real wages do not always capture the significance of the dramatic material advances in the past two centuries. Figure 1.2 shows the incredible economic progress for the average American in the 20th century, including the poor who previously thought that the world was passing them by.

LIVING STANDARDS HAVE RISEN DRAMATICALLY, EVEN FOR THE POOR

Percentage with...	Among all families in 1900	Among poor families in 1970
Flush toilets	15%	99%
Running water	24%	92%
Central heating	1%	58%
One (or fewer) occupants per room	48%	96%
Electricity	3%	99%
Refrigeration	18%	99%
Automobiles	1%	41%

Figure 1.2
Source: Stanley Lebergott, *The American Economy* (Princeton, 1976), p. 8.

A more recent study by W. Michael Cox and Richard Alm indicate that almost all Americans, including the poor, have advanced materially since the early 1970s. See figure 1.3 below.

MATERIAL ADVANCES FOR THE POOR SINCE 1971

Percentage of Households with . . .	Poor Households 1984	Poor Households 1994	All Households 1971
Washing machine	58.2	71.7	71.3
Clothes dryer	35.6	50.2	44.5
Dishwasher	13.6	19.6	18.8
Refrigerator	95.8	97.9	83.3
Freezer	29.2	28.6	32.2
Stove	95.2	97.7	87.0
Microwave	12.5	60.0	<1.0
Color television	70.3	92.5	43.3
Videocassette recorder	3.4	59.7	0
Personal computer	2.9	7.4	0
Telephone	71.0	76.7	93.0
Air-conditioner	42.5	49.6	31.8
One or more cars	64.1	71.8	79.5

Figure 1.3
Source: W. Michael Cox and Richard Alm, *Myths of Rich and Poor* (Basic Books, 1999) p.15.

There is much other evidence of advancement. Since the beginning of the 20th century, average life expectancy has risen from 42 years to 75 years of age, while infant mortality has fallen from 200 deaths per 1,000 births to 11 per 1,000 births. Improvements in sewage systems, water supply, food preparation, and medical technology has sharply reduced death and disease. Worker fatalities have dropped markedly during the past century. The overall accidental death rate has shown a steady decline throughout the 20th century (see figure 1.4).

GETTING SAFER ALL THE TIME

Accidental Death Rate Per 100,000 Population

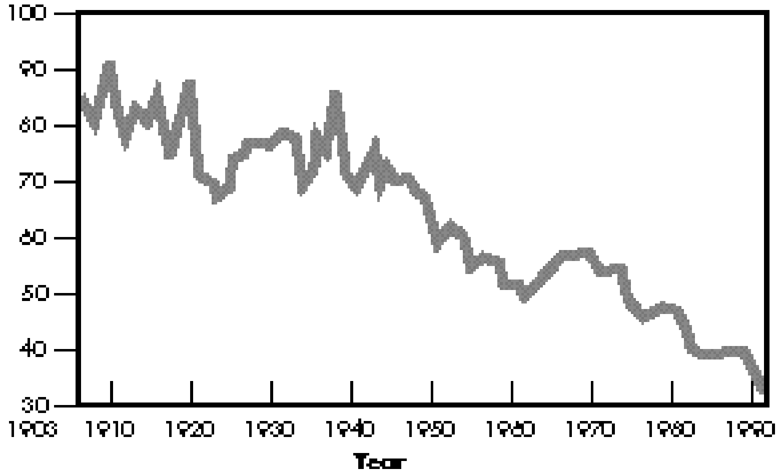

Figure 1.4
Source: National Safety Council, *Wall Street Journal,* December 14, 1993, p. A17

Vacation time has increased this past century from two days a year to two weeks on average. Americans today work half as many hours in factories, farms and stores as they did when this century began. Kitchen appliances, canned foods and other household amenities have dramatically reduced household and family chores from 70 hours per week in 1900 to 30 hours today. At the turn of the century, a typical housewife had to load her stove with tons of wood or coal each year and fill her lamps with coal, oil or kerosene. Nearly half of all American families drew water from farm wells for washing clothes, for baths, or for gardens. Today almost none do.[1]

Additional research by Cox and Alm demonstrate advances in practically every economic indicator of household behavior. See figure 1.5.

[1]These fascinating details of progress in everyday life are found in Stanley Lebergott, *Pursuing Happiness: American Consumers in the Twentieth Century* (Princeton University Press, 1993).

IMPROVEMENTS IN A VARIETY OF ECONOMIC INDICATORS SINCE 1970

Item	1970	Mid-1990s*
Average size of new home (square feet)	1,500	2,150
Average household size (persons)	3.14	2.64
Average square feet per person in the household	478	814
New homes with central heat and air-conditioning	34%	81%
New homes with a garage	58%	87%
Housing units lacking complete plumbing[a]	6.9%	2.3%
Homes lacking a telephone[a]	13.0%	6.3%
Households with computer	0%	41%
Households with no vehicle[a]	20.4%	7.9%
Households with two or more vehicles[a]	29.3%	61.9%
Households with color TV	34.0%	97.9%
Households with cable TV	6.3%	63.4%
Households with two or more TV's	30.7%	72.8%
Households with videocassette recorder	0%	89%
Households with answering machine	0%	65%
Households with cordless phone	0%	66%
Households with computer printer	0%	38%
Households with camcorder	0%	26%
Households with cellular phone	0%	34%
Households with CD player	0%	49%
Households with clothes washer	62.1%	83.2%
Households with clothes dryer	44.6%	75.0%
Households with a microwave	<1%	89.5%
Households with coffeemaker	88.6%	99.9%
Households with dishwasher[b]	26.5%	54.6%
Households with vacuum cleaner	92.0%	99.9%
Households with frost-free refrigerator	<25%	86.8%
Households with outdoor gas grill[c]	<5%	28.5%
Mean household ownership of furniture[b]	$2,230	$3,756
Mean household ownership of appliances[b]	$943	$1,547
Mean household ownership of video and audio products[b]	$308	$2,671
Mean household ownership of jewelry and watches[b]	$728	$1,784
Mean household ownership of books and maps[b]	$731	$1,074
Mean household ownership of sports equipment[b]	$769	$1,895
Mean household net worth[a]	$86,095	$126,843
Median household net worth[a]	$27,938	$59,398
Vehicles per 100 persons aged 16 and older[a]	53	94
Work time to buy gas for a 100-mile trip	49 minutes	26 minutes
Annual visits to doctor[d]	4.6	6.1
Per capita consumption of bottled water (gallons)[b]	<1	11.1
Americans taking cruises	0.5 million	4.7 million
Air-travel miles per capita	646	>2,260
Per capita spending on sporting goods[b]	$60	$213
Recreational boats per 1000 households[a]	139	173
Manufacturers' shipments of recreational vehlcles[a]	30,300	281,000

*Mid-1990s data are for 1997, except where indicated.
[a] Data for 1995. [b] Data for 1996. [c] Data for 1993. [d] Data for 1994.
All monetary figures are in constant (1997) dollars.

Figure 1.5
Source: Cox and Alm, *Myths of Rich and Poor,* p. 7.

The above indicators of a rising standard of living are often lost in the maze of statistics about rising crime, abortion, unwed mothers, pollution and environmental destruction, the national debt, and so forth.

Unfortunately, not everyone has participated in this miracle of prosperity, including millions of indigent human beings who remain fatalistic about their future. But at least prosperity appears to be within reach for more and more individuals around the world. As we enter a new millennium, hope of the good life has never been so great for so many people in so many parts of the globe.

WHAT IS ECONOMICS?

This discussion of living standards and prosperity leads us to our definition of economics. Economic science concerns itself with "the ordinary business of life," as Alfred Marshall calls it—the creation of wealth, income, living standards, and the production and distribution of goods and services—all aimed to improve our lot in life. In the broadest sense, then, economics can be defined as follows:

Economics is the study of how people seek to improve their standard of living through the creation of wealth.

Throughout this course, we will continually refer to this central point of economics—the possibility that people and societies can create wealth and increase their living standards. Whether we discuss supply and demand, technology, competition, interest rates, employment, or government policy, our ultimate goal will be how these actions affect our economic well-being, for better or worse.

Of course, economic analysis can also be used to determine the cause of wealth destruction and the lowering of living standards by individuals, businesses and nations. Economics provides the tools to analyze fraud, theft, crime, false advertising, and government mismanagement.

WHAT IS WEALTH?

If economics is the study of wealth and how it is created or diminished, let us first consider what we mean by wealth.

Wealth consists of goods and services that fulfill our immediate and future wants.

Increasing wealth and improving our standard of living means an expansion in three things: **The quantity, quality and variety of goods and services.** Any economic activity that improves our standard of living creates wealth and makes life more interesting, diverse, and more fulfilling. What do we mean by economic growth? In its broadest sense, it signifies an expansion in the quantity, quality and variety of usable goods and services.

By this common-sense definition, the more wealth we have, the more we can fulfill our wants and needs and, hence, the higher our standard of living becomes. All human beings — rich and poor, white and black, male and female — attempt to improve their condition on earth.

The purpose of economics is to outline a blueprint of prosperity for individuals and the world and, just as importantly, to warn us to avoid roads that lead to poverty and a lower standard of living. Throughout history, nations have been blessed by periods of prosperity, yet they have also suffered periodically from the pains of depression. Hopefully, by learning the principles of sound economics, we can avoid stagnation and achieve a sustained economic growth and improved living standards.

MONEY AND WEALTH

Is money wealth?

Suppose you get a raise at work. Does a higher income suggest that you have become wealthier? Probably, but only on the condition that you are able to purchase more goods and services with the additional income. If inflation rises and the prices of goods and services increases by more than your income, you are no better off than before. In fact, your standard of living has declined because your real income has declined, after taking the loss of purchasing power into account.

Money is not a good or service. It is a *medium of exchange* which facilitates the purchase of goods and services. Money and exchange facilitate the wealth-creation process. Money is only valuable as long as it has the capability of buying products and services. If money loses value too quickly, due to inflation, it no longer commands purchasing power and eventually may not be worth the paper it's printed on.

An Experiment With a Dollar Bill

Query: Suppose your economics professor asks a student to come forward. In front of the entire class, she is asked to tear up a dollar bill. Following a little encouragement, she commits the deed.

The question is: Has the student destroyed wealth? Discuss this question among your classmates.

Some of your fellow students may say "Yes." The dollar bill represents a store of value based on past work, either by the student or perhaps her father who gave her the dollar bill for lunch. Tearing up the dollar bill destroys the ability of the student to buy a snack. She has lost wealth and her standard of living has declined, albeit slightly.

Others will dispute the loss of wealth. Has the destruction of this dollar bill reduced the number of chairs, pencils, or paper in the classroom? Has it eliminated the amount of food, clothing, cars, or buildings in the world? Has the lunch or snack disappeared? Clearly, they have not. The snack is still available for someone, though perhaps not this student. Therefore, they conclude, wealth has not been destroyed.

Who is right? Actually, they both are correct. Wealth on a worldwide or national scale has not been destroyed. The same amount of goods and services exist after the dollar was destroyed. Granted, the student's wealth declined, but *everyone else's* wealth appreciated in value because she tore up a dollar bill. Her wealth has been reduced, while the rest of the world's wealth has slightly increased due to the increase in purchasing power caused by the reduction in the currency. In other words, the tearing up of the dollar bill did not destroy wealth, it merely redistributed it.

What if the student breaks a pencil in half, making it unusable? Clearly, such an act would destroy wealth for her and the community. Everyone is made worse off when goods and services are destroyed.

Focusing on *making money* instead of *producing goods* can be a distraction from our goal of increasing our standard of living. There are some cases where money making is not equivalent to increasing the standard of living—business and financial fraud, theft, embezzlement, and occupations that retard productive work. In these cases, people are getting money, but not contributing to the well-being of society.

Do the Factors of Production Constitute "Wealth"?

We defined wealth as goods and services which improve our lives. This definition implies that goods and services must be useful and practical to consumers in order to be of value. Such finished consumer products include the food we eat, the clothing we wear, the cars we drive, the houses we live in, and the musical instruments we play. They are the retail products and services which enhance our lives.

But we also place considerable value on unfinished products—raw land, iron ore, forests, and other commodities. Wheat in its raw form is uneatable, yet it commands a substantial price in the marketplace. Iron ore is useless in its natural state, but steel manufacturers are willing to pay a good price for it. Economists refer to these products as **land and capital goods.**

Land refers to the ground earth, natural resources and raw commodities that are available for our use.

Capital goods are the machinery, tools, and materials used in the production process toward final consumption.

Land and capital goods are two important factors in the production of goods and services. The third factor is **labor.** Land, labor and capital are the trinity of the production process. The fourth factor of production, **entrepreneurship,** brings together the right amount of land, labor and capital, to achieve our economic goals. These four factors are the essential ingredients in transforming raw commodities and imputs into retail goods and services which we use and consume every day.

The four factors of production are part of society's wealth because they constitute **derived consumer value.** The fact that consumer goods and services command value implies that the **means of production** also command value, for without land, labor, capital, and entrepreneurship, consumer goods could not be produced. That is why we state, "Wealth consists of goods and services which fulfill our immediate and *future* wants." Land, labor and capital contribute to *future* needs and wants.

IS LABOR WEALTH?

Labor is a crucial ingredient in the transformation of materials into finished products. By specializing, men and women use their physical and mental powers to push the economic process along its path toward the production of useful goods and services. Workers rent out their services to firms in return for wages or salaries. And they also help produce goods and services as self-employed entrepreneurs. A nation's wealth is measured in large part by the knowledge, skills and effort of its labor force. Therefore, we conclude, labor is a significant part of a country's wealth.

HOW WEALTH IS CREATED

The goal of every worker in the economic process is straight-forward. If you asked the average person in the street, "Why do you work?", the answer would probably be, "To earn more money and enjoy life." Or they might say, "To provide a decent living for me and my family." Behind the desire for "earning more money" are more far-reaching goals: to pay for a child's college education, to have an adequate retirement income, to own a house, to pay off some debts, to have leisure time, or to contribute to a good cause.

One of the purposes of this course is to expand your horizons and to see the big picture of the economy. The economist wants you to see beyond the goal of "earning money." Each actor in the marketplace is doing much more than simply making money.

In reality, each person is playing a part in moving the production process along its way toward final consumer use and, hence, creating wealth and a higher standard of living for everyone. By specializing, what economists call the **division of labor,** output is maximized.

What do miners do? They dig valuable metals and minerals out of the ground, and through various technical means, manufacture them into more usable commodities. Iron ore is made into iron, clay into copper, and rock into gold.

What do manufacturers do? They transport raw commodities and other materials and transform them into more usable products.

What do scientists do? Chemists, biologists, physicists and engineers analyze the properties of organic and inorganic elements and test them in laboratories to make better and more useful products.

What do sales people do? They make consumers aware of the products that are available for consumption, and facilitate purchasing by providing information to consumers.

What do artists do? They buy paints, brushes and boards and create an image for their customers to enjoy.

What do bankers do? They provide a variety of services which allow business people to engage in profitable enterprises and they provide a more convenient way for consumers to pay their bills, borrow money, and fulfill their desires.

What do postal workers do? They transport and deliver letters, packages and other information so that businesses can further their goals and consumers can enjoy reading about their friends and relatives.

What do teachers do? They inculcate knowledge and skills into students so that the students can more efficiently assist in the goods-service process somewhere along the line, either while going to school or after they graduate.

What do doctors do? By offering medical advice, products and services, they seek to prevent illnesses and overcome diseases, and extend our productive lives.

What do lawyers do? They can facilitate mergers and acquisitions in business, reward victims of fraud and injury, and promote justice.

The list of activities is endless, but the purpose behind these activities is the same—pushing forward the transformation process of unfinished goods toward final use by consumers.

Of course, in every job or profession, there are individuals whose actions are harmful to society, even though they may materially benefit themselves in the short run...Manufacturers that produce shoddy products, sales people who defraud, doctors who engage in malpractice, lawyers who take advantage of the system. But, in the long run, on net balance, most individuals seek to engage in legal, productive activity.

THE PROCESS OF WEALTH CREATION

Economics is concerned with five major questions:

What should be produced? (Consumer goods, capital goods?)

For **whom** should the products and services be produced? (consumers, producers, foreigners?)

How much should be produced? (A million cars, a dozen concerts a year?)

How should goods be produced? (What materials? What process? How much labor? How much machinery?)

When should it be produced? (How long will it take to build that building? Finish college?)

Once "what" and "for whom" to produce are decided, producers determine how much should be produced, what is the best way to produce it, and how long it will take—and can they make it for a profit? These are critical concerns of every producer in the marketplace.

Every good and service goes through a basic process. Figure 1.6 illustrates this process.

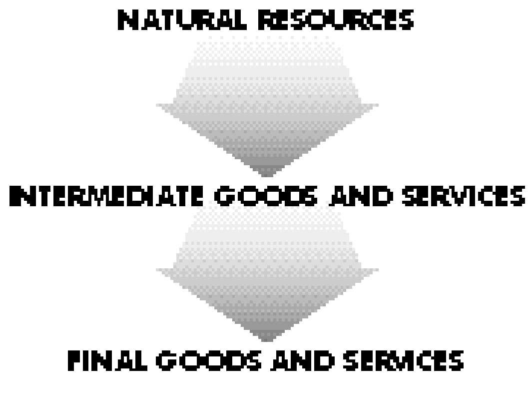

Figure 1.6. *How wealth is created.*

Economics can therefore be summarized as follows: The basic purpose of economic activity is to turn *unfinished, unusable* goods into *finished, usable* goods. Landlords, workers, and capitalists cooperate together at every stage of production in order to bring useful goods and services to the consumer.

IS ECONOMICS ONLY CONCERNED WITH MATERIAL GOODS?

The study of economics has often been criticized as a science of materialism and greed, focusing excessively on material possessions and the philosophy that "more is better." Is this a valid criticism?

It depends. Economics is concerned with **what** is produced and **for whom.** In order to survive, every person must first take care of their essential needs—food, water, shelter, clothing, etc. Almost all of these essential needs are material in nature. You cannot ask people to listen to a sermon on an empty stomach. Once these basic needs are met, however, people are free to seek numerous non-material desires, whether intellectual, social, or spiritual.

That is why we defined economics to include "services" and not just "goods." Services provided by doctors, lawyers, ministers, educators, entertainers, and sports figures go beyond material needs.

Still, the free-enterprise system, with its constant emphasis on providing and developing new and varied wants, often provides a blizzard of material offerings for the consumer. It's easy to get caught up in a material world, always seeking and demanding more. You can spend your entire day enjoying leisure activities—watching television, playing sports, driving a fancy car, or going to the movies. Economic advances sometimes enhance the "me" generation. Material well-being may not be the same as quality of life.

THE MORALITY OF THE MARKET

In extolling the benefits of the market, let us not forget that the market produces some products and services that many people may find objectionable. There are firms engaged in the production of mind-changing drugs, prostitution, X-rated movies, cigarettes, moonshine, bullfights and illegal weapons, just to name a few examples. Economists do not justify the public's appetite for these controversial "goods," but simply respond by saying that an unhampered market does an efficient job in reflecting the wants and desires of the general public, whether good or bad. As social scientists, economists tend to avoid making moral judgments, leaving it up to consumers to decide for themselves what to buy or not buy. Economics as a science should be "value free."

At the same time, it is important to note that in a free society, individuals can choose for themselves what kinds of products and services they produce or consume. One person may work at a cigarette factory, another may choose to work for an accounting firm. One person may come home from work, turn on the television and drink a beer, while another may spend the evening as a volunteer at a local hospital. People can choose not to participate in a capitalist world they regard as "greedy and materialistic." Furthermore, a sufficient income and net worth may allow an individual to retire from the fast-paced world of business and finance and devote more time to charitable, religious, or political causes.

INCOME AND WEALTH DISTRIBUTION

Economists and social thinkers are also interested in how well each individual and group participates in the economy. They ask the question, **"For whom** are the goods and services produced?" Can only the wealthy members of the community afford automobiles or nice houses? Are the poor as well as the rich given a basic education? Are certain vested interests in society given special privileges and benefits?

We saw earlier how poor Americans have participated in the American Dream since 1900 (see figure 1.2). Is that trend continuing, or worsening? Are the real wages of unskilled workers keeping up with skilled workers? Are all citizens taxed fairly by the government? Can middle-class families afford basic housing, or college education for their children? Do CEOs get paid too much relative to the average workers of a corporation? These issues of relative equality of income, opportunity, and wealth are frequently debated in today's modern society.

WASTE AND POLLUTION

One major area of growing concern over the past generation has been the issue of air pollution and the environment. When natural resources are transformed into consumer and capital goods, there are various forms of waste and pollution at virtually every stage of production. As economies have expanded and matured, the management and reduction of waste and pollution have become critical concerns.

THE ROLE OF GOVERNMENT

Finally, there is the paramount issue of the role of the government in the economy. Is it possible to produce all the goods and services necessary for a fulfilling life in a completely voluntary society? Or is it necessary to have the government—the agency of force—produce certain goods and services (known as "public goods")?

Can the free-enterprise system provide an adequate supply of roads, utilities, police, prisons, and courts of law? Can it produce a sufficient defense system against foreign aggression? Can it create its own stable monetary system? How could the free market deal with the problem of consumer fraud and deceptive business practices? Can the marketplace and trade operate without strict enforcement of individual property rights?

And, if government is necessary to produce some public goods, can government expenditures be financed through voluntary contributions instead of coercive taxation?

In forthcoming chapters, we will address these issues: What kind of government, and how much of it, is optimal?

SUMMARY

Here are the main points of this chapter:

1. Very few usable goods are provided by nature; almost all consumer goods (and many services) must be manufactured through a long, arduous series of production processes.
2. Economics is the study of wealth and how individuals improve their standard of living.
3. Wealth consists of goods and services that fulfill our immediate and future wants.
4. Society becomes wealthier by increasing the quantity, quality, and variety of goods and services.
5. Money represents wealth only to the extent that it provides purchasing power to buy goods and services.
6. The creation or destruction of money does not change the amount of wealth in society, but merely redistributes wealth among society's members.
7. The factors of production—land, labor, and capital—constitute wealth because they derive their value from final consumer demand.
8. Actors in the marketplace—landlords, workers and capitalists—do more than merely "make money"—they are helping transform unfinished goods into products and services that consumers can use, and thus enhance people's standard of living.
9. The marketplace does not produce only material goods, but the market also produces non-material services of intellectual, social, or spiritual value.
10. Relative equality of income, wealth and opportunity are controversial issues that concern all members of society, including economists.
11. Waste management and pollution control have become a growing concern as society expands and matures.
12. Government may have to provide certain public goods and services that the private marketplace may not adequately provide for.

IMPORTANT TERMS

Economics	Land
Wealth	Labor
Quantity, quality and variety	Capital
Goods and services	Capital goods
Money and exchange	Derived value
Factors of production	Means of production
	Division of labor

INFLUENTIAL ECONOMISTS

ADAM SMITH AND THE WEALTH OF NATIONS

Name: Adam Smith (1723-90)

Background: Scottish philosopher, economist and professor. Considered the founder of modern economics, although physiocrats Richard Cantillon (1680-1734) and Jacques Turgot (1727-81) also qualify as influential "pre-Adamites." Smith is also regarded as the founding father of the British classical school (followed by David Ricardo, John Stuart Mill, and Alfred Marshall).

Major Work: Author of the most famous book in economics, *An Inquiry into the Nature and Causes of the Wealth of Nations*. Proclaimed an unabashed endorsement of free-market capitalism, it was appropriately published in 1776, the year of the American Revolution and the signing of the Declaration of Independence.

Today a collector might pay over $50,000 for a first edition of the two-volume work, assuming he could find one.

Strengths: Adam Smith considered wealth and economic growth to be the focal point of economic analysis, an approach we have appropriately followed. Smith rejected the mercantilist view that wealth arose from the acquisition of gold and silver, but instead arose from production of goods and services.

Anyone who has taken the time to read Smith's biblical tome (unfortunately, too few economists have read it cover to cover) can see why it has received widespread praise—it is a grand book, full of interesting facts, cogent criticisms, and fascinating philosophical points.

Smith's strengths lie in his analysis of how individual liberty, economic freedom, and capital investment creates wealth, and how government policies of high taxes, deficit spending, and commercial regulations restrict productivity, growth and freedom.

Sample Quotation: "To prohibit a great people, however, from making all that they can of every part of their own produce, or from employing their stock and industry in the way that they judge most advantageous to themselves, is a manifest violation of the most sacred rights of mankind."

Most Famous Idea: The doctrine of "Invisible Hand," that the unintentional acts of self-interest in business leads to the general welfare of the public. "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."

Weakness: Smith sometimes contradicted himself and led economics down some strange roads—his bias toward agriculture, his bizarre distinction between productive and unproductive labor, and his "labor theory of value," which was fully exploited by Karl Marx, the German economist and father of revolutionary socialism. *The Wealth of Nations* failed to explain the "diamond-water paradox" (why is "useful" water so cheap, while "impractical" diamonds so expensive?) even though Smith's lecture notes of a decade earlier has solved the theory of value based on the principle of marginal subjectivism. Smith's notorious loss of memory set the economics profession back generations; it was nearly a century later, in the 1870s, that the marginalist revolution was rediscovered by Carl Menger (Austrian), William Stanley Jevons (British) and Leon Walras (French-Swiss).

Personality: Adam Smith was the quintessential absent-minded professor. Though a member of many gentlemen's clubs and societies, he never married and never had a serious relationship with any woman. His closest friend was philosopher David Hume (1711-76). Smith was so preoccupied with work that he frequently found himself lost in town or fallen into a muddy hole. He spent ten years writing his 900-page *magnum opus* after traveling in Europe. Ironically, Smith ended his career as an agent of British customs and, contrary to his free-trade beliefs, strongly enforced the mercantilist trade laws and cracked down on smugglers. He died in 1790 and was buried in Edinburgh.

PROBLEMS TO PONDER

1. We concluded that our standard of living is reduced when goods and services are destroyed in a society. How, then, do you respond to the statement, "War is good for the economy"? Can you identify advances in medicine and technology as a result of war? What are the disadvantages? Are the tools of modern science still beneficial when converted to instruments of war? Is dynamite a benefit to mankind when it helps build a tunnel but harmful when it destroys a bridge?

2. Determine which of the following activities increases or decreases society's wealth:
   (a) A lucky person wins five million dollars in the Florida state lottery.
   (b) An investor sells a stock and doubles his money.
   (c) A thief breaks into a house and steals some jewelry.
   (d) Government spends more money on unemployment compensation.

3. Which of the following statements (taken from textbooks) best describes your definition of economics:
   (a) "Economics is the study of choice." (Buchholz)
   (b) "Economics is the study of how scarce resources are allocated among competing ends." (Ruffin & Gregory)
   (c) "Economics is the study of how societies use scarce resources to produce valuable commodities and distribute them among different groups." (Samuelson & Nordhaus)
   (d) "The problem of economic society is, in large part, to change land—that is, natural resources—into finished goods, and to place those goods in the hands of the persons who will consume them." (Gemmill & Blodgett)

4. A student is assigned to find out how many different kinds of bread are sold in a local grocery store. Before announcing the number to the class, poll the students to see how many think the number is above (a) 20, (b) 30, (c) 40, or (d) 50. Has the variety of goods increased over time?

5. A student is assigned to find out how many different kinds and sizes (packages) of beer are sold in a local liquor store. Have the store manager give the student a printout of all varieties and sizes of beer. Then have the student report to the class. Before the student reports, poll the other students to see how many types and varieties of beer are sold.

6. Many people say that their standard of living, as measured by real income or wages, declined over the past decade or two. Given our definition of wealth, is this true? Has the quantity, quality and variety of goods and services declined over the past ten years? Choose a specific consumer or industry group, and decide whether it advanced or declined (electronics, office machines, telecommunications, food, clothing, automobiles, etc.).

7. Politicians bemoan the decline in the U. S. manufacturing sector, asserting that it reflects a decline in our nation's standard of living. Is this correct? Are there other sectors of the economy which have counterbalanced this decline?

8. Can you name some examples of unfulfilled wants in the marketplace? Why aren't they being produced to your satisfaction?

9. Give some examples of goods or services which have declined in quality over the past few years? Why it is an exception to the rule that quality increases for all goods and services over time?

10. Is one's standard of living the same as one's qualify of life? Can a person be materially well-off (high standard of living), but unhappy (low quality of life)?

11. How would you respond to the following statement: "Death increases welfare. When a baby dies, the nation's per-capita income rises. When a baby is born, per capita income falls. Death, in sum, reduces poverty and increases per capital welfare." Based on our definition of wealth, does the birth of a child constitute an increase or decrease in a nation's wealth? What are the benefits of an increasing population? What are the disadvantages? On net balance, is population growth good or bad?

12. Suppose Japan's per capita income is double the United States' per capita income, when both are measured in U. S. dollars. Does this mean that the average Japanese is wealthier than the average American? What factors should you consider in comparing one country's standard of living with another? Are international comparisons legitimate?

13. Figure 1.7 introduces an alternative indicator of economic well-being, "Genuine Progress Indicator," which takes social and ecological factors into consideration (resource depletion, income distribution, unemployment and underemployment, long-term environmental damage, etc.) Do you agree with this new definition of economic progress? Do you concur with the proponents of GPI, that "the overall health of the [U. S.] economy shows a steady decline since the 1970s?"

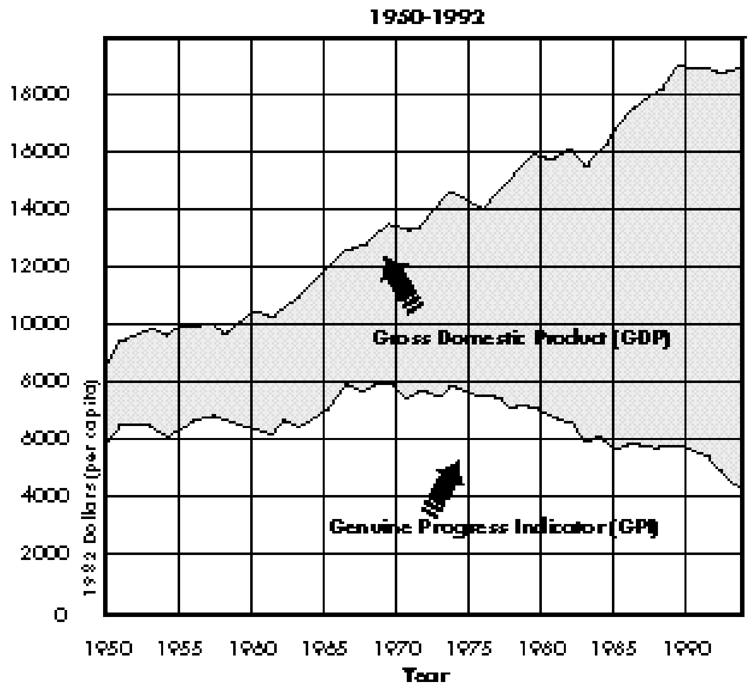

Figure 1.7. *Gross Production vs. Genuine Progress.*

14. Select a country and determine how much progress has been made over the past fifty years in terms of percentage of citizens having appliances, automobiles, and other consumer goods. How does this country compare with the United States?

15. Textbook writers Ruffin and Gregory state, "Economics cannot teach you how to be rich." Do you agree? If so, what do you hope to get out of studying economics?

16. British economist David Ricardo attempted to change the approach of economic inquiry. In a letter to Thomas Malthus, he wrote, "Political economy, you think, is an enquiry into the nature and causes of wealth; I think it should rather be called an enquiry into the laws which determine the division of the produce of industry amongst the classes who concur in its formation." What effect would Ricardo's shift away from production and toward distribution have on the world's attitude toward capitalism? Was Karl Marx influenced by Ricardo's approach?

17. Do retired workers create wealth, or are they simply consumers who make no further contributions to productivity? (Hint: Where do retirees invest their retirement funds?)

18. List as many products as you can that did not exist twenty years ago. Then make a list of a products that we no longer use. Which list is larger? Why?

19. There was once a billionaire who died single in a small country and requested that all his wealth be converted to cash and burned at a public bonfire, so that he could benefit everyone in his country. What was he thinking? Did he accomplish his goal?

20. John Stuart Mill said, "There is nothing more insignificant than money." Given what we have discussed in this chapter, what did he mean?

FOR ADDITIONAL READING

- Adam Smith, *The Wealth of Nations* (1776). A classic work still worth reading today. Various editions are available today, but my favorite is the 1937 Modern Library "Cannon" Edition, with an introduction by Max Lerner.

- Stanley Lebergott, *Pursuing Happiness: American Consumers in the Twentieth Century* (Princeton University Press, 1993). Lebergott is professor emeritus of Wesleyan University and an expert on the American economy of the 20th century. His book is full of amazing accounts about American households and how living conditions improved dramatically over the years.

- W. Michael Cox and Richard Alm, *Myths of Rich and Poor* (Basic Books, 1999). This is the most optimistic book I've ever read on new ways to measure economic well-being, the benefits of downsizing, and the dynamics of the U. S. economy. Absolutely fascinating reading.

- Nathan Rosenberg and L. E. Birdzell, Jr., *How the West Grew Rich* (Basic Books, 1986). An excellent history of Western economic development from the Middle Ages to the present.