available) and eliminating all other subsidy programs (welfare, food stamps, and perhaps even Social Security) would make the cost of a negative income tax lower than the cost of all our existing supplemental income programs combined.

Yet however we pay for it, we must first decide that we really do *want* to help the poor. We do have the resources, but we seem to lack the public will. A while back, I received an advertisement in the mail called "Shop the Other America." In it was a statement that strongly supported the need for a change in our country's attitude:

> Before we can decide how to accomplish the goal of eliminating poverty, or whether we can afford to do the job, we must first decide that we want to do it—that we will no longer expect children to fill hungry bellies with Kool-Aid and candy, to be the prey of rats, to be weakened with tuberculosis, to grow up amid filth and organized vice, to be taught in deteriorating classrooms by teachers who have lost hope, and that we will no longer allow old people to huddle in lonely, heatless rooms, living on pennies, unable to afford needed medicines and services.

We began this chapter with a strongly worded letter written to a St. Paul newspaper and ended with another statement—equally strong in emotion, but light years away in ideology and purpose. Reconciling these two honest, but opposite, views is the unfinished business of us all.

Questions for Thought and Discussion

1. Why are there so many myths concerning the poor in the United States?
2. Is "poverty" an absolute or a relative concept? Explain.
3. To what degree does the exploitation of workers in a capitalist system contribute to poverty?
4. What are the arguments for or against the contention that people are poor "only because they are lazy"? What is your opinion? Explain.
5. Check with your local or state welfare department to determine what "means tests" must be met in your city in order to receive welfare assistance.

7

The Macroeconomy: Gross National Product

In Chapters 4 and 5, we moved away from the "microscopic" approach of supply and demand and proceeded to examine the major economic sectors of businesses, households, and government. Now we are ready to take an even broader point-of-view. This chapter is an introduction to large (macro) economic concepts. It will be as if we were looking at the broad outlines of our economy from some point in outer space, using an "economic telescope" that allows us, in effect, to view the whole picture at once. Economists call this panoramic view of the economy **macroeconomics.**

You probably know quite a bit about macroeconomics already. In fact, you undoubtedly read about it in the newspapers, hear about it on the morning or evening news each day, and listen to arguments about it in every election year. Macroeconomics is the *study of inflation, unemployment, recession, the gross national product (GNP), economic growth, and other broad concepts of an economic system.*

Who uses macroeconomic concepts? Our economic "soothsayers" use them when they attempt to "divine" the future. Economic forecasters ponder charts and tables like veteran handicappers at the racetrack. They pore over income trends, savings and interest rates, consumer attitudes, housing starts,

automobile sales, birth rates, and other economic indicators, and then they ask such questions as, "Will we have recession or inflation next year—or both?," "Will interest rates go up or down?," and "What will happen to productivity?"

Then there are the popular oracles (and sometimes the charlatans) of the various investment markets (stocks and bonds, commodities, and gold and silver) who use macroeconomic concepts to help them predict the ups and downs of their respective markets, where a change of a fraction of a percent can add or subtract thousands of dollars to or from a client's account.

There are also the economic philosophers who ask the larger human questions: "Where are we now, and where are we going?" "What is the impact of materialism and technology on the global environment today, ten years from now, or even 100 years from now?" "Futurists" also utilize macroeconomic ideas and indicators.

Finally, our public officials must know something about macroeconomics. They have immediate, urgent concerns. They are like harried physicians, constantly checking the pulse of the economy, anxious to learn about its strength or weakness, growth or stagnation. These men and women have directly or indirectly accepted the responsibility for maintaining the economic health of the country. They include not only the President of the United States and his staff but also Congress and the decision makers in the hierarchy of the Federal Reserve banking system.

Their economic power is derived from controlling the federal budget, the money supply, and interest rates in response to changing economic conditions. A good understanding of macroeconomics is their best tool for intelligent planning and decision making.

Wealth and Gross National Product

Perhaps the best place to start our exploration of this vast area of economic theory and reality is with the idea of **wealth**—a yardstick by which many countries judge each other. Indeed, the United States is the envy of the world because of its tremendous man-made and natural wealth. If we were to add up the value of all our buildings and structures, our equipment and inventories, our land and other natural resources, we would be

worth something over 20 trillion dollars (1 trillion is 1000 billion). This figure, however, does not tell us very much about our *current* economic health. Why? There are two reasons.

First, wealth must be *utilized* before it can contribute to present-day living standards. Black Africa, for example, has tremendous natural wealth, but this wealth has generally not been utilized and, consequently, most of its people remain economically poor.

Second, the value of a nation's resources in the form of wealth does not necessarily tell us anything about that nation's *current production.* Without a continuous flow of new goods and services, nations eventually consume their available wealth (like retired couples who use up their savings and are eventually forced to sell their personal belongings to purchase food). Our economy, like a growing family, must have a *continuous* flow of income and real output if it is to maintain present living standards.

What we are looking for is a concept that goes beyond wealth—a concept that will tell us something about the total output that our land, machines, and labor produce year after year. This concept is the **gross national product** (GNP). Economists define GNP as a *measure of the final value of all goods and services produced in the economy in a year's time.* Like the amount of our national wealth, GNP is an enormous figure almost too large to comprehend. By the turn of the decade (1989–1990), for example, the total GNP was approximately $5 trillion per year!

We should pause a moment to consider the difficulties in computing a precise value for the GNP. Of course, much of our total national output can easily be traced simply by adding up total incomes (as shown on our personal income-tax returns, for example). There are, however, many goods and services that do not see the "light of day" and are never officially recorded. An unrecorded "cash" transaction (designed to bypass the Internal Revenue Service) is one example; billions of dollars in illegal drug trade represent another.

Probably a much larger category of unrecorded production takes place (perfectly legally) under the heading of *nonmarket transactions.* We are all a part of this "underground" market in one way or another. For example, each time we do something for ourselves that we *could have paid someone else to do,* our

economic activity goes unrecorded in the official GNP statistics. Mary Smith, for example, tunes her car every six months, but Mary doesn't pay herself (and record it on her income-tax form). But if a garage had done the same work, the labor bill might have been $50 or $100. The garage, in turn, would report this amount to the government as "service performed," and Mary's tune-up *would* become part of our GNP.

Obviously, these do-it-yourself projects—from growing your own food to remodeling a basement—cannot be accurately accounted for in our national income statistics. The problem posed by nonmarket transactions is considerably amplified when we note the billions of dollars of unpaid household services that are performed mainly by women. Then add to this the billions of dollars of unpaid volunteer services. Although our government does attempt to estimate the value of some of these unrecorded transactions, it is impossible to do this with any precision.

Another problem associated with the GNP is our strong belief in the dictum that "happiness is a rising GNP." We often assume that when GNP is rising, we are all automatically better off. Many economists, however, are now beginning to voice some important concerns about this philosophy.

For example, before we can say we are better off when the GNP goes up, we should look at what is happening to the *population* during the same period of time. If output rises by 1 percent and population increases by 3 percent, the average family will suffer a *decline* of 2 percent in their standard of living. It's a simple principle that is often ignored, especially in less-developed countries, where population growth frequently outstrips the rise in GNP.

Another point to consider is the *distribution* of the GNP pie. A rising GNP, for example, may be translated into 25 percent more housing, but if the extra houses are second homes for wealthy families, then we can hardly say that the average citizen is benefiting from this increase in the GNP. Brazil provides us with a good example. This South American county has certainly been maintaining a "growth economy," but the fruits of its rising GNP have been concentrated mainly in the modern sector. The majority of poor Brazilians, who live in the nonindustrial economy, benefit very little, if at all, from their country's rising GNP. Our generalization that "happiness is a rising GNP" in this case turns out to be a painful mockery to the poor families who watch their country's income differentials widen as the years go by.

We should also consider the questions of *quality*. Does the quality of our GNP change over time? Indeed it does. Many people argue that the quality of our merchandise and services has declined over the years; they point to shoddy workmanship, inferior materials, and "planned obsolescence" as proof of deteriorating product and service quality. Industry might reply, however, that the quality of some products has actually improved. Radios and televisions, for example, are cheaper and more reliable now than they were 20 years ago; radial tires are not only safer but will outlast the tire made 30 years ago; and the computer of today is better, faster, and generally cheaper than the one manufactured a decade ago.

What is your own opinion about the quality of products and services? On balance, has it gone up or down? Either way, product and service quality is an important factor to consider when comparing GNP statistics from year to year.

Instead of looking at individual products, we might also examine the general *composition* of the overall GNP. It has been said, for example, that "if we all came down with cancer, it would boost the GNP." Hospital revenues and the incomes of doctors, nurses, radiologists, and drug companies would go up—at least temporarily. Yet clearly no one could say that we would be "better off" in such a situation.

Thus, there are economic "bads" as well as "goods." Many economists are beginning to look at GNP growth to try and analyze which expenditures are truly beneficial and which ones are not. For example, it is generally agreed that health-care costs associated with air and water pollution do not add to our net economic well-being, nor do excessive military expenditures.

British economist Leopold Kohr has identified a whole range of products and services that he labels *density commodities*. These goods are purchased by consumers, government agencies, and businesses simply to *offset the impact of living in a high-density environment* among large-scale social institutions (schools, businesses, cities, etc.[22]). *Density expenditures* include the cost of traffic accidents, many legal services, commuting expenses, escapist media, illegal opiates, prescribed relax-

ants and stimulants, and the ever-more powerful headache remedies ("Life got tougher, so we got stronger," says an Excedrin advertisement). Add to this list the expenditures associated with crime (squad cars, prisons, protective services, exotic burglar alarms and foolproof locks, personalized handguns, mace, etc.), and you begin to get an idea of how much our GNP is devoted to these goods. We are forced to purchase density goods, says Kohr, not because they offer us a net improvement in our standard of living, but because we have evolved into a society in which such goods are necessary to offset the negative side effects of modern urban life. Again, the billions of dollars spent on these types of goods may not add much to the net welfare of the population, but they are all counted as part of our official GNP statistics.

Progrowth versus Antigrowth

Kohr and other maverick economists have actually questioned the prevailing economic ethic that continuous growth is desirable, particularly for the United States and other highly industrialized countries ("the overdeveloped nations," as Kohr calls them). Kohr and those who share his way of thinking are considered advocates of an "antigrowth" or "steady-state" policy that some label "sustainable economics." In this camp, we would also include Herman E. Daley, Paul Ehrlich, and Lester Brown, head of the World Watch Institute and author of *Building a Sustainable Society* (W. W. Norton, 1981). All of these economists are concerned with what they see as the results of economic growth: the steady erosion of the quality of the global environment and the decline of the world's nonrenewable resources. Perhaps the extreme point of view comes from Professor Ezra Mishan of The London School of Economics:

> You could very well have stopped growing after the First World War. There was enough technology to make life quite pleasant. Cities weren't overgrown. People weren't too avaricious. You hadn't really ruined the environment as you have now.[23]

Most economists, however, continue to be defenders of growth, agreeing with Adam Smith's historic contention that "the progressive state is in reality the cheerful and the hearty

state to all order of society. The stationary is dull; the declining, melancholy."

There is the view among progrowth advocates that humans are surprisingly *adaptable* and that our species has proven over thousands of years that it is capable of making appropriate change when change is warranted. If we run low on certain resources, our market economy (through higher prices) will signal that it's time to find (or create) new substitutes: fiber optics instead of copper, strong (and inexpensive) plastics in place of steel or aluminum; or perhaps a trend toward miniaturization to conserve a myriad of scarce resources. If fossil-fuel supplies become depleted, we will (progrowth economists say) find substitutes or evolve more highly efficient systems with our technological know-how. In this sense, the progrowth position seems to go hand-in-hand with what we might call "technological optimism."

And we should pause to consider Irving Kristol's argument that growth is, in fact, *a necessary precondition* to a modern democracy in which "the expectations of tomorrow's bigger pie, from which everyone will receive a larger slice, . . . prevent people from fighting to the bitter end over the division of today's pie."[24] Defenders of economic growth also point out that very few families can say that they are satisfied with their current economic status. In addition, they remind us that we still have many lower-income people in the United States who are likely to be permanently poor in a zero-growth economy. A final point from progrowth economists is that it is much easier to deal with pollution in a growing economy; cleaning up the environment will be expensive, and the additional resources must come from somewhere.

Defenders of economic growth are greatly disturbed that an increasing number of people want to go back to the "good old days"—days that progrowth people believe were not so good. They ask, "Why can't environmentalists and other antigrowth advocates understand that technology and economic growth are conquering nature for the benefit of mankind?"

Author Mel Ellis, a naturalist who has demonstrated unique sensitivity for both economic and environmental problems, writes

> Man almost literally made the cow, the fat corn kernel, the plump turkey, the beautiful rose. And if he erred in his enthusiasm and polluted his raw materials, his resources, he still made the world enormously better.[25]

Most environmental advocates probably do understand the benefits of technology, progress, and economic growth, but their attention is directed to different concerns. They are listening to different sounds. Essayist E. B. White once summed up this attitude with the comment, "I would feel more optimistic about a bright future for man if he spent less time proving that he can outwit Nature and more time tasting her sweetness and respecting her seniority."[26]

The immediate concerns of environmentalists are not the eradication of poverty or the benefits of high-speed air travel or the advantages of the computer over the abacus. They do not see a thousand acres of timber as so many completed homes. They see the grandeur of the forest and its enduring value as a generator of oxygen, a climatic stabilizer, and a habitat for plants and wildlife—and they work for its preservation. Instead of seeing the Appalachian hills as a source of strip-mined coal for heating homes, they ask, "What are the adverse consequences of strip mining for the land and its inhabitants?"

> The D-9 bulldozer is the largest built by the Caterpillar Tractor Corporation. It weighs some 48 tons and is priced at $108,000. With a blade that weighs 5000 pounds, rising five feet and curved like some monstrous scimitar, it shears away not only soil and trees but a thousand other things—grapevines, briars, ferns, toadstools, wild garlic, plantain, dandelions, moss, a colony of pink lady-slippers, fragmented slate, an ancient plow point, a nest of squeaking field mice—and sends them hurtling down the slope, an avalanche of the organic and the inorganic, the living and the dead. The larger trees that stand in the path of the bulldozer—persimmons, walnuts, mulberries, oaks, and butternuts—meet the same fate. Toppled, they are crushed and buried in the tide of rubble.[27]

Along the same line, who could not empathize with novelist James Michener's feelings of sadness and guilt after he returned to the site of his boyhood stream?

> This marvelous stream in which I used to fish and where as a boy I had gone swimming, this ribbon of cool water which has been a delight to generations of farmers, was now a fetid body of yellowish water with not a living thing in it. Frogs, fish, waterlilies, bullrushes, and ducks' nests had all vanished. . . . The loss of my stream had occurred under my nose, as it were, and with me making no protest. When I finally saw what had happened, I was ashamed of my inattention. What in those years had I been doing that was more important than saving a stream? If we continue to abuse and destroy our resources, many of us will be asking that question thirty years from now, but by then it will be too late, and some of the precious things we have lost will not be recoverable.[28]

Environmentalists, in short, are distressed by the ugliness of overdevelopment. They are angered by worldwide pollution in such forms as oil spills and acid rain and also by the growing lists of extinct or endangered species of wildlife. They feel that these are the unnecessary consequences of human selfishness. They are saddened by our blindness—a blindness to the possibility that much of what we value today may be lost forever. Of those who favor "development at any cost," they ask, "Why can't you see what uninhibited growth is doing to those things we must preserve for future generations?" The great debate over growth is based on simple but profound differences in values. It will, undoubtedly, remain a public issue of great magnitude for years to come.

GNP and Inflation

We will consider one more major challenge to the attitude that "happiness is a rising GNP." Imagine the following scene. George and Mary Franklin were overjoyed when their joint income increased to $45,000 a year; they had never dreamed they would make that much money. Yet by the end of the year, the Franklin family felt poorer than ever. Not only had they failed to save any money, but Mary Franklin claimed that their standard of living was worse now than it was five years ago. What went wrong?

The answer to this question should be obvious, since we are all adversely affected by the same economic malady. The problem was *the rise in the general price level*—what economists commonly call **inflation.** Not only does inflation distort and diminish your income, my income, and the Franklins' income, but inflation also distorts the GNP statistics.

A simple example can illustrate this point. Let's assume, for the sake of simplicity, that the U.S. economy produces only one product, wheat. Over a time period of three years, watch what happens to GNP when the price of wheat is inflated from $1 to $5 per bushel:

Year	Output (in bushels)	Price (per bushel)	GNP (price × output)
1	3	$1	$3
2	5	4	20
3	9	5	45

Take a look at the GNP column. If someone gave you only the GNP figures $3, $20, and $45, would you say that these figures were a good representation of output? Of course not, because they do not give you the whole story. These GNP figures are, in fact, greatly inflated when you compare them with the increase in actual output of wheat: the GNP has increased to 15 times its original value (from $3 to $45), while output has increased to only three times its original value (from 3 to 9 bushels). In short, if all you saw were these GNP statistics, you would have a very distorted picture of the economic situation. Economists have a name for this "distorted" or inflated GNP; they call it **money GNP.** Using the same idea, we can now see why Mary and George Franklin felt a little bewildered when they discovered that their *money income* did not seem to give them any additional purchasing power. Money income and money GNP are, by themselves, inaccurate indicators of the real economic situation.

Unfortunately, money GNP *is* the figure that is commonly quoted by newspapers, public officials, writers, and teachers. The 1989–1990 total GNP figure of $5 trillion mentioned earlier is, in fact, money GNP. Is there any way of getting a more accurate picture of our GNP? What we need is a more realistic value for the GNP—a GNP figure that does not include inflated prices.

To adjust for inflation in our example, we must compare each year's output with the wheat price of a single *base year.* We could choose any of the three years for our base, and then apply this base-year price to the outputs of the other two years. Let's make year 1 our base. We then multiply the base-year price ($1 per bushel) by the actual output *of all three years:*

Year	Output (in bushels)	Real GNP (Year 1 = base year)
1	3	$ 3
2	5	5
3	9	9

The result is **real GNP,** which, as you can see in the table, gives us a far more accurate picture of each year's production than money GNP did.

Of course, the United States does not make one product; it produces millions and millions of goods and services. How can the GNP be adjusted for inflation when there are so many different prices to consider? The same principle applies; economists compare the outputs of all other years to a base-year price. The big difference is that now the price changes of many goods and services (not just one) must be averaged. This average price level can easily be summarized in one statistic, called the **price index,** or the **GNP price deflator.** The price index for the base year is always equal to 100, no matter which year we choose. Any change in overall prices is reflected by a change in the price index.

For example, if we use 1982 as the base year (price index = 100) and we find that prices between 1982 and 1985, on average, went up 10.9 percent, then the price index for 1985 would be 110.9. Once we knew that the 1985 index was 110.9, then we would be able to convert 1985 output "into 1982 dollars." So suppose you hear someone report that the GNP in 1985 was $4015 billion. You now know that this person is giving you the inflated money GNP figure. How then do you calculate real GNP for 1985? You simply divide the price index for 1985 (110.9) into the money GNP ($4015 bil.) and then multiply your answer by 100:

$$\text{Real GNP (1985)} = \frac{4015}{110.9} \times 100 = \$3620 \text{ billion}$$

Now you know the value of real GNP (in 1982 dollars) for 1985. The $3620 billion figure is somewhat less than the inflated $4015 billion figure originally quoted. Unfortunately, the distinction

between real and money GNP is rarely made, and the public is often misled by published figures.

We are now prepared for what might be called "The Shortest Economic History Course Ever," as we sum up 60 years of U.S. economic history in less than a page! Look carefully at the chart below. Do you notice any interesting trends in the following figures? (If you read them carefully, you will notice four major economic events in this 60-year history.)

The first significant event is the *deflation* (a drop in price) and the Great Depression of the 1930s. In this insecure decade, Americans were faced with high unemployment, a severe drought, and widespread poverty.

The second period of interest is the great upsurge of real economic growth from the early 1940s to the late 1960s. In an accounting sense, this 30-year period was a phenomenal age of American prosperity. In the decade of the 1960s alone, *real* growth per year averaged nearly 4-1/2 percent! By the middle of this decade, political writer Theodore White would write in his book, *The Making of the President, 1964*:

Year	Money GNP (in billions)	Price Index (1982 = 100)	Real GNP (in billions)
1930	$91.2	14.2	$ 642
1935	72.8	12.5	582
1940	100.4	13.0	772
1945	213.4	15.7	1359
1950	288.3	23.9	1206
1955	405.9	27.2	1492
1960	515.3	30.9	1668
1965	705.1	33.8	2086
1970	1015.5	42.0	2418
1975	1598.4	59.3	2695
1980	2732.0	85.7	3188
1985	4014.9	110.9	3620
1990*	5463.0	131.5	4154

*preliminary

1982= base year

Source: Economic Report of the President, February, 1991. BEA (U.S. Department of Commerce). 1990 estimate from *Blue Chip Economic Indicators*, Sedona, AZ, Aug. 10, 1990; p. 5.

> There was no doubt that John F. Kennedy and his economists had brought about the first fundamental change in American economic policy since Franklin D. Roosevelt—and the nation glowed with a boom that was one of the world's wonders. The boom terrified Europeans, angered the underdeveloped in the world, baffled the Russians.[29]

Yet only five years later, after our long Vietnam war, the glow of economic boom and prosperity turned into a bonfire of inflation, the third major event of this 60-year period. During the 1970s, overall prices in the United States rose some 104 percent—a greater increase than in any other comparable period!

And finally, we come to the fourth and most recent period. If the 1970s were characterized by unprecedented inflation, the 1980s was an era of **disinflation,** or a rapid decline in the inflation rate. It began with the initiation of a tight monetary policy in the fall of 1979 and was fortified by two recessions (in 1980 and in 1982), greater international competition in manufacturing, and the collapse of OPEC (the international oil cartel). Few, if any, of America's best economic forecasters predicted the magnitude of this reduction in the inflation rate:[30] from 9 to 10 percent in 1979, 1980, and 1981 down to 3 or 4 percent by the middle of the 1980s. Although it set the stage for a more stable, moderate-growth economy during the rest of the decade, the sudden drop in inflation was initially accompanied by high unemployment and an alarming number of bankruptcies, especially in farm, oil, mining, and related industries.

Thus, unemployment and, at times, inflation mar much of our economic history and continue to plague us as we approach a new century. We will now examine these two extreme economic maladies in more detail in our continuing exploration of macroeconomics.

Questions for Thought and Discussion

1. How difficult would it be to compare the GNP of an industrialized country with the GNP of a Third World country?
2. How is GNP data actually collected in the United States?
3. How would the viewpoints of members of a local chamber of commerce compare with the idea that "happiness is a rising GNP"?