Chapter 1

A Brief Economic History of the United States

More than two centuries ago, some Americans believed it was "manifest destiny" that the 13 states on the eastern seaboard would one day be part of a nation that stretched from the Atlantic to the Pacific. Was it also our manifest destiny to become the world's economic superpower?

CHAPTER OBJECTIVES

In this chapter you'll learn:

- How we grew from a primarily agricultural nation of 4 million people to an industrial power of over 280 million.
- How the Civil War, World War I, and World War II affected our economy.
- How our nation was shaped by suburbanization after World War II.
- What major factors affected our economic growth decade by decade from the 1920s into the new millennium.
- What the "new economy" is and how it differs from the "old economy."

Introduction

Our economy is a study in contrasts. We have poverty in the midst of plenty; we have rapidly expanding industries like computer software and medical technology, and we have dying industries like shipbuilding and consumer electronics; we have won the cold war against communism, but we may be losing the trade war against Japan and China.

Which country has the largest economy in the world, the United States or Japan? Believe it or not, our national output is more than double that of Japan.

America is the sole superpower and has one of the highest standards of living in the world. Communism, to borrow a phrase from Karl Marx, has been "swept into the dustbin of history"—at least, the version that dominated the former Soviet Union after the 1920s and Eastern Europe after World War II is no more.

The baby-boom generation has earned higher incomes than any other generation in history. Indeed, Americans once considered it their birthright to do better than their parents. But that ended some 30 years ago, and a lot of young people are worrying about their futures.

In the decade following the 1990–91 recession, our economy generated more than 22 million new jobs. That's the good news. The bad news is that half of them pay less than $15,000 per year. These so-called McJobs are often low-level, minimum wage, dead-end positions with no health benefits.

The children of the first baby boomers have already entered the job market. And their parents, after paying $25,000 or more a year to educate them, are wondering about their children's job prospects.

Between 1997 and early 2001, the job market was the strongest in memory, partly because large corporations, in their aggressive downsizing drives, may have laid off too many workers of their parents' generation. Jim Morin, a cartoonist, put it this way: "Hi dad. The good news is I found a job. The bad news is it's the same job you were downsized out of last year."

In these first few chapters, we'll be looking at how our economy uses its basic resources, at the workings of the law of supply and demand, and at how capitalism and other economic systems work. But first we need to ask how we got here. After all, the American economic system evolved over a period of more than 300 years.

> Those who cannot remember the past are condemned to repeat it.
>
> –George Santayana–

What did the great philosopher mean by this? Perhaps he meant that those who do not learn enough history the first time around will be required to repeat History 101. But whatever he meant, it is clear that to understand our economy today, we need to know how it developed over the years.

Did you see *Back to the Future?* You may have seen parts 1, 2, and 3, but let's stick with just part 1. Imagine being sent back to the 1950s. The way people lived then was very different from the way we live today—and the 1950s represented life on the fast track compared to daily existence during the first decade of the 20th century. So before we worry about today's economy, we'll take a few steps back and look at life in this country about 200 years ago.

Part 1: The American Economy in the 19th Century

Agricultural Development

America has always had a large and productive agricultural sector. At the time of the American Revolution, 9 out of every 10 Americans lived on a farm; 100 years later, however, fewer than 1 out of every 2 people worked in agriculture. Today, it's fewer than 2 in 100, but those 2 not only feed America but also produce a huge surplus that is sold abroad.

America had an almost limitless supply of land.

Unlike Europe, 200 years ago America had an almost limitless supply of unoccupied fertile land. The federal government gave away farmland—usually 160-acre plots (one-quarter of a square mile)—to anyone willing to clear the land and farm on it. Although sometimes the government charged a token amount, it often gave away the land for free.

Mass Production and Mass Consumption

Mass production is possible only if there is also mass consumption. In the late 19th century, once the national railway network enabled manufacturers to sell their products all over the country, and even beyond our shores, it became feasible to invest in heavy machinery and to turn out volume production, which, in turn, meant lower prices. Lower prices, of course, pushed up sales, which encouraged further investment and created more jobs. At the same time, productivity, or output per hour, was rising, which justified companies in paying higher wages. and a high-wage workforce could easily afford all the new low-priced products.

Henry Ford personified the symbiotic relationship between mass production and mass consumption. Selling millions of cars at a small unit of profit allowed Ford to keep prices low and wages high—the perfect formula for mass consumption.

So we had a mutually reinforcing relationship. Mass consumption enabled mass production, while mass production enabled mass consumption. As this process unfolded, our industrial output literally multiplied, and our standard of living soared. And nearly all of this process took place from within our own borders with only minimal help from foreign investors, suppliers, and consumers.

After World War II, the Japanese were in no position to use this method of reindustrialization. Not only had most of their plants and equipment been destroyed by American bombing, but also Japanese consumers did not have the purchasing power to buy enough manufactured goods to justify mass production of a wide range of consumer goods. And so the Japanese industrialists took the one course open to them: As they rebuilt their industrial base, they sold low-priced goods to the low end of the American market. In many cases they sold these items—textiles, black-and-white TVs, cameras, and other consumer goods—at half the prices charged in Japan.

Japanese consumers were willing to pay much higher prices for what was often relatively shoddy merchandise, simply because that was considered the socially correct thing to do. Imagine American consumers acting this way! Within a couple of decades, Japanese manufacturers, with a virtual monopoly in their home market and an expanding overseas market, were able to turn out high-volume, low-priced, high-quality products. We will look much more closely at Japanese manufacturing and trade practices in the chapter on international trade.

The great abundance of land was the most influential factor in our economic development during the 19th century. Not only did the availability of very cheap or free land attract millions of immigrants to our shores, but it also encouraged early marriage and large families, since every child was an additional worker to till the fields and handle the animals. Even more important, this plenitude of land, compared to amount of labor, encouraged rapid technological development.

At the time of George Washington's inauguration in 1789, there were about 4 million people living in the United States. By the time of the War of 1812, our population had doubled. It doubled again to 16 million in 1835 and had doubled still again by 1858. Our numbers continued to grow, but at a somewhat slower pace, reaching the 100 million mark in 1915, the 200 million mark in 1968, and reached 281 million in 2000.

America's large and growing population has been extremely important as a market for our farmers and manufacturers. After World War II, Japanese manufacturers targeted the American market, while the much smaller Japanese market remained largely closed to American manufactured goods. Japan—with less than half our population and, until very recently, much less purchasing power than the United States—has largely financed its industrial development with American dollars. (See box titled "Mass Production and Mass Consumption.")

Although all regions of the United States remained primarily agricultural in the years following the Civil War, New England, the Middle Atlantic states, and the Midwest—with their already well-established iron, steel, textile, and apparel industries—were poised for a major industrial expansion that would last until the Great Depression. In contrast, the South, whose economy was based on the cash crops of cotton, tobacco, rice, and sugar, as well as on subsistence farming, remained primarily an agricultural

Southern economic development remained agricultural.

Two Economic Conflicts Leading to the Civil War

In the decades before the Civil War, the economic interests of the North and South came into sharp conflict. Northern manufacturers benefited from high protective tariffs, which kept out competing British manufacturers. The Southern states, which had only a small manufacturing sector, were forced to buy most of their manufactured goods from the North and to pay higher prices than they would have paid for British goods had there been no tariff.*

As the nation expanded westward, another conflict reached the boiling point: the expansion of slavery into the new territories. In 1860, when Abraham Lincoln had been elected president, most of the land between the Mississippi River and the Pacific Ocean had not yet been organized into states. As newly formed states applied for membership in the Union, the big question was whether they would come in as "free states" or "slave states." Lincoln—and virtually all the other leaders of the new Republican Party—strenuously opposed the extension of slavery into the new territories of the West.

The Southern economy, especially cotton agriculture, was based on slave labor. The political leaders of the South realized that if slavery were prohibited in the new territories, it would be only a matter of time before these territories entered the Union as free states and the South was badly outvoted in Congress. And so, as Abraham Lincoln was preparing to take office in 1861, 11 Southern states seceded from the Union, touching off the Civil War, which lasted four years, cost hundreds of thousands of lives, and largely destroyed the Southern economy.

The two major consequences of the war were the freeing of 4 million black people who had been slaves and the preservation of the Union with those 11 rebel states. It would take the nation a full century to overcome the legacies of this conflict.

*Tariffs are fully discussed in the chapter on international trade.

region well into the 20th century. Its railroads had been largely destroyed by invading Northern armies during the war. Indeed, to this day there are places in Georgia where you can see evidence of the destruction caused by General William Tecumseh Sherman's army. Do you know what the twisted rails were called? Sherman's bow ties.

The South continued to be the poorest section of the country, a relative disadvantage that was not erased until the growth of the Sun Belt took off in the 1960s. The post–Civil War rallying cry "The South will rise again" did not even *begin* to ring true until 100 or so years later. (See box titled "Two Economic Conflicts Leading to the Civil War.")

Southern agriculture developed very differently from agriculture in the other regions of the nation. We know, of course, that most of the labor was provided by slaves whose ancestors had been brought here in chains from Africa. On the average, Southern farms were large. By 1860, four-fifths of the farms with more than 500 acres were in the South. The plantation owners raised commercial crops such as cotton, rice, sugar, and tobacco, while the smaller farms, which were much less dependent on slave labor, produced a wider variety of crops.

In the North and the West, self-sufficient, 160-acre family farms were most common. Eventually, corn, wheat, and soybeans became important commercial crops. But in the years following the Civil War, increasing numbers of people left the farms of the North to take jobs in manufacturing.

Bad times for agriculture

Times were bad for agriculture from the end of the Civil War until the close of the century. The government's liberal land policy, combined with increased mechanization, vastly expanded farm output. The production of the nation's three basic cash crops—corn, wheat, and cotton—rose faster than did its population through most of that period. Why did production rise so rapidly? Mainly because of the rapid technological progress made during that period (see box titled "American Agricultural Technology"). This brings us to supply and demand, which is covered in Chapter 3 and which explains why times were bad for agriculture despite expanded output. If the supply of corn increases faster than the demand for corn, what happens to the price of corn? It goes down. And this happened to wheat and cotton as well. Although other countries bought up much of the surpluses, the prices of corn, wheat, and cotton declined substantially from the end of the Civil War until the turn of the century.

Supply and demand

American Agricultural Technology

In the 19th century, a series of inventions vastly improved farm productivity. In the late 1840s, John Deere began to manufacture steel plows in Moline, Illinois. These were a tremendous improvement over the crude wooden plows that had previously been used.

Cyrus McCormick patented a mechanical reaper in 1834. By the time of the Civil War, McCormick's reaper had at least quadrupled the output of each farm laborer. The development of the Appleby twine binder, the Marsh brothers' harvesting machine, and the Pitts thresher, as well as Eli Whitney's cotton gin, all worked to make American agriculture the most productive in the world.

The mechanization of American agriculture, which continued into the 20th century with the introduction of the gasoline powered tractor in the 1920s, would not have been possible without a highly skilled farm work force. Tom Brokaw described the challenge that farmers faced using this technology:

> Farm boys were inventive and good with their hands. They were accustomed to finding solutions to mechanical and design problems on their own. There was no one else to ask when the tractor broke down or the threshing machine fouled, no 1-800-CALLHELP operators standing by in those days.[*]

[*]Tom Brokaw, *The Greatest Generation,* New York: Random House, 1999, p. 92. The "greatest generation" was the one that came of age during the Great Depression and won World War II.

The National Railroad Network

The completion of the transcontinental railroads

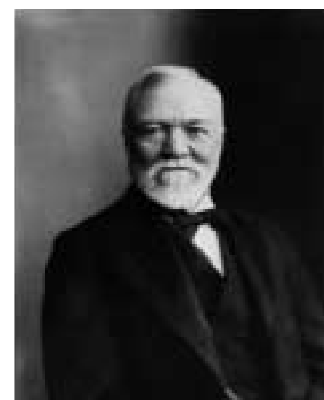
The completion of a national railroad network in the second half of the 19th century made possible mass production, mass marketing, and mass consumption. In 1850, the United States had just 10,000 miles of track, but within 40 years the total reached 164,000 miles. The transcontinental railroads had been completed, and it was possible to get virtually anywhere in the country by train. Interestingly, however, the transcontinental lines all bypassed the South, which severely retarded its economic development well into the 20th century.

In 1836, it took a traveler an entire month to get from New York to Chicago. Just 15 years later, he could make the trip by rail in less than two days. What the railroads did, in effect, was to weave the country together into a huge social and economic unit, and eventually into the world's first mass market (see again box titled "Mass Production and Mass Consumption").

John Steele Gordon describes the economic impact of the railroads:

> most East Coast rivers were navigable for only short distances inland. As a result, there really was no "American economy." Instead there was a myriad of local ones. Most food was consumed locally, and most goods were locally produced by artisans such as blacksmiths. The railroads changed all that in less than 30 years.[1]

Before railroads, shipping a ton of goods 400 miles could easily quadruple the price. But by rail, the same ton of goods could be shipped in a fraction of the time and at one-twentieth of the cost.



Andrew Carnegie, American industrial capitalist (National Portrait Gallery/Art Resource)

The Age of the Industrial Capitalist

The last quarter of the 19th century was the age of the industrial capitalist. The great empire builders—Carnegie (steel), Du Pont (chemicals), McCormick (farm equipment), Rockefeller (oil), and Swift (meat packing), among others—dominated this era. John D. Rockefeller, whose exploits will be discussed in the chapter on corporate mergers and antitrust, built the Standard Oil Trust, which controlled 90 percent of the oil business. In 1872, just before Andrew Carnegie opened the Edgar Thomson works, the

[1]John Steele Gordon, "The Golden Spike," *Forbes ASAP,* February 21, 2000, p. 118.

The Development of the Automobile Industry

Nothing is particularly hard
if you divide it into small jobs.

–Henry Ford–

Who was the first automobile manufacturer to use a division of labor, to use a moving assembly line, and to bring the materials to the worker instead of the worker to the materials? Was it Henry Ford? Close, but no cigar. The man was Henry Olds, who turned the trick in 1901 when he started turning out Oldsmobiles on a mass basis. Still another Henry, Henry Leland, believed it was possible and practical to manufacture a standardized engine with interchangeable parts. By 1908, he did just that with his Cadillac.

Henry Ford was able to carry mass production to its logical conclusion. His great contribution was the emphasis he placed on an expert combination of accuracy, continuity, the moving assembly line, and speed, through the careful timing of manufacturing, materials handling, and assembly. In a sense, then, Henry Ford was the precursor to today's Japanese automaker.

Back in 1908, just 200,000 cars were registered in the United States. In 1915, Ford produced more than one-third of the 880,000 motor vehicles built that year. In 1923, Ford built 57 percent of the 4 million cars and trucks produced. But soon General Motors supplanted Ford as the country's number one automobile firm, a position it continues to hold. In 1929, motor vehicle production peaked at 5.3 million units, a number that was not reached again until 1949.

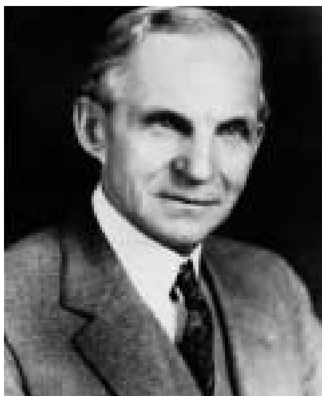
United States produced less than 100,000 tons of steel. Only 25 years later, Carnegie alone was turning out 4 million tons, almost half of the total American production. Again, as supply outran demand, the price of steel dropped from $65 to $20 a ton.

Part 2: The American Economy from 1900 through World War I

Until the last quarter of the 19th century, American economic history was largely agricultural history. Thereafter, the emphasis shifted to manufacturing. By the end of World War I, agriculture played a relatively minor role in our economic development.

Industrial Development

On the world's technological cutting edge



Henry Ford, American automobile manufacturer (The Granger Collection, New York)

By the turn of the century, America had become an industrial economy. Fewer than 4 in 10 people still lived on farms. We were among the world's leaders in the production of steel, coal, steamships, textiles, apparel, chemicals, and agricultural machinery. Our trade balance with the rest of the world was positive every year. And although we continued to export most of our huge agricultural surpluses to Europe, increasingly we began to send the countries of that continent our manufactured goods as well.

We were also well on our way to becoming the world's first mass-consumption society. The stage had been set by the late-19th-century industrialists. At the turn of the 20th century, we were on the threshold of the automobile age (see box titled "The Development of the Automobile Industry"). The Wright brothers would soon be flying their plane at Kitty Hawk, but commercial aviation was still a few decades away.

American technological progress—or, if the South can forgive me, Yankee ingenuity—runs the gamut from the agricultural implements previously mentioned to the telegraph, the telephone, the radio, the TV, and the computer. It includes the mass-production system perfected by Henry Ford, which made possible the era of mass consumption and the high living standards that the people of all industrialized nations enjoy today. America has long been on the world's technological cutting edge, as well as being the world's leader in manufacturing.

This technological talent, a large agricultural surplus, the world's first universal public education system, and the entrepreneurial abilities of our great industrialists combined to enable the United States to emerge as the world's leading industrial power by the time of World War I. Then, too, fortune smiled on this continent by keeping it out of harm's way during the war. This same good fortune recurred during World War II; so, once again, unlike the rest of the industrial world, we emerged from the war with our industrial plant intact.

Agricultural Development

Agricultural conditions really turned around in the first two decades of the 20th century. Production stabilized, and agriculture enjoyed mild prosperity from 1900 to 1913. Then came world War I, which brought the farmer unprecedented prosperity despite a huge increase in output. Wheat production, for example, which exceeded 1 billion bushels in 1915, passed the 3-billion-bushel mark in 1920.

But in the years immediately after the war, agriculture went into a terrible slump. The price of corn, which had been $1.50 a bushel in 1919, fell to just 30 cents. Wheat fell from $2.15 to 40 cents. And cotton went from 36 cents a pound all the way down to a nickel. It was not until the New Deal, World War II, and the massive federal farm-subsidy program that followed the war that farmers finally were able to get on their feet again.

Part 3: The American Economy between the Wars

When did the United States emerge as a mature industrial economy? We'll take as our starting point the decade of the 1920s, when America truly became a mass-consumption economy. But that economy did not have any distinct time of departure. It evolved from a set of powerful forces that were described in the first part of this chapter.

Let's proceed with a brief decade-by-decade account of the country's economic performance since the end of the first World War. Actually, not all these decades are *exactly* 10 years long, but nothing's perfect. Like the rest of life, economic history does not unfold into uniform periods of ups and downs.

The Roaring Twenties

The postwar boom

World War I ended on November 11, 1918. After a mild and very brief recession, during which our economy reverted to peacetime production, we enjoyed a short economic boom from the spring of 1919 through January 1920. This boom was set off mainly by pent-up consumer demand for housing, clothing, and automobiles; the existence of a large amount of cash, bank deposits, and savings bonds just waiting to be spent; a high foreign demand for American products; and continuing high spending by the federal government. (These same forces, albeit on a much larger scale, were to fuel the prosperity enjoyed in the years immediately following World War II.)

The postwar depression

The Roaring Twenties actually began and ended with depressions. In early 1920, consumers, upset with high prices, began cutting back on their purchases. The Federal Reserve,[2] which controls our money supply, had already begun to tighten credit. Meanwhile, the federal government quickly managed to cut its large wartime budget deficit to zero, which also depressed the economy.[3]

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[2]I'll discuss how the Federal Reserve controls the growth of our money supply in the chapter on the monetary policy of the Federal Reserve in *Economics* and *Macroeconomics*.

[3]Federal budget deficits and their effect on our economy are discussed in a later chapter of *Economics* and *Macroeconomics*.

Our Financial House of Cards

Buying stocks on margin was one of the more visible financial excesses of the Roaring Twenties. The Florida real estate boom, which included thousands of spectacular underwater properties, was another. But the major abuse was the erection of a financial superstructure of holding companies and investment trusts that came crashing down in the early 1930s.

When the crash came, the banks that had financed these ventures began to fail, since the speculators were in no position to repay their loans. And as these banks failed, other banks around the country began to fail as well, either because they had large deposits at the failing banks or because depositors, nervous about the safety of their deposits, began withdrawing their savings. So even the banks that had little or nothing to do with the financial excesses of the 1920s were forced to close. And when they did, millions of depositors found that they had lost their entire life savings.

Retailers, stuck with heavy inventories, curtailed their purchases from manufacturers. Wholesale prices dropped 45 percent. Within months, a worldwide depression was in the works. But recovery began very quickly in the United States as excess inventory was worked off. The most important factor in the recovery was that the long-term investment opportunities that existed in 1919–20 were still present in 1921.

Like the pent-up demand for residential housing, there was a tremendous demand for commercial buildings. The automobile industry was growing rapidly and required a further expansion of auxiliary industries such as steel, glass, and rubber, as well as service stations and new roads.

The spreading use of electricity

Another important development in the 1920s was the spreading use of electricity. During this decade, electric power production doubled. Not only was industrial use growing, but by 1929 about two out of every three homes in America had been wired and were now using electrical appliances. The telephone, the radio, the toaster, the refrigerator, and other conveniences became commonplace during the 1920s.

Between 1921 and 1929, national output rose by 50 percent. Despite two minor recessions in 1924 and 1927, most Americans thought the prosperity would last forever. The stock market was soaring, and instant millionaires were created every day, at least on paper.

How to become a millionaire in the stock market

It was possible, in the late 1920s, to put down just 10 percent of a stock purchase and borrow the rest on margin from a stockbroker, who, in turn, borrowed that money from a bank. If you put down $1,000, you could buy $10,000 worth of stock. If that stock doubled (that is, if it was now worth $20,000), you just made $10,000 on a $1,000 investment. Better yet, your $10,000 stake entitled you to borrow $90,000 from your broker, so you could now own $100,000 worth of stock.

This was not a bad deal—as long as the market kept going up. But, as you've heard so many times, what goes up must come down. And, as you well know, the stock market came crashing down in October 1929 (see box titled "Our Financial House of Cards"). Although no one knew it at the time, the economy had already begun its descent into a recession a couple of months before the crash. And as the economy continued to sink, that recession became the Great Depression.

Curiously, within days after the crash, several leading government and business officials—including President Hoover and John D. Rockefeller—each described economic conditions as "fundamentally sound." The next time you hear our economy described in those terms, you'll know we're in big trouble.

The Great Depression

The August 1929 recession

By the summer of 1929, the country had clearly built itself up for an economic letdown. The boom in sales of cars and electrical appliances was over. The automobile market was saturated. Nearly three out of four cars on the road were less than six years old, and

model changes were not nearly as important then as they are today. The tire industry had been overbuilt, and textiles were suffering from overcapacity. Residential construction was already in decline, and the general business investment outlook was not that rosy.

Had the stock market not crashed and had the rest of the world not gone into a depression, we might have gotten away with a moderate business downturn. Also, had the federal government acted more expeditiously, it is quite possible that the prosperity of the 1920s, after a fairly short recession, could have continued well into the 1930s. But that's not what happened. What did happen completely changed the lives of the people who lived through it, as well as the course of human history itself.

Even through 1930 there was no clear indication that we were in anything worse than a bad recession. A recession is a decline in national output for at least six months. There was a slight, abortive recovery in the early months of 1930, with rises in both automobile production and residential construction. Wage rates were well maintained throughout the year. But prices began to decline, investment in plant and equipment collapsed, and a drought wiped out millions of farmers. In fact, conditions grew so bad in what became known as the Dust Bowl that millions of people from the Midwest just packed their cars and drove in caravans to seek a better life in California. Their flight was immortalized in John Steinbeck's great novel *The Grapes of Wrath,* which was later made into a movie. Although most of these migrants came from other states, they were collectively called Okies, because it seemed at the time as if the entire state of Oklahoma had picked up and moved west.

The Dust Bowl and the "Okies"

By the end of 1930, thousands of banks had failed and the generally optimistic economic outlook had given way to one of extreme pessimism. Yet in the early months of 1931, the economy seemed to be attempting to stage another recovery. But whatever chance it had was crushed that spring by the collapse of the entire international financial structure. From here on, it was all downhill. By the beginning of 1933, banks were closing all over the country; by the first week in March, every single bank in the United States had shut its doors.

The bank failures

When the economy hit bottom, in March 1933, national output was about one-third lower than it had been in August 1929. The official unemployment rate was 25 percent, which meant that some 16 million Americans were out of work at a time when our country's population was less than half its present size. To lend some perspective, at the low point of the 1990–91 recession, nearly 10 million Americans were officially unemployed.

Hitting bottom

Herbert Hoover, thirty-first president of the United States
(National Portrait Gallery/Art Resource)

But official figures tell only part of the story. Millions of additional workers had simply given up looking for work during the depths of the Great Depression, as there was no work to be had. Yet according to the way the government compiles the unemployment rate, these people were not even counted since they were not actually looking for work.[4]

The Depression was a time of soup kitchens, people selling apples on the street, large-scale homelessness, so-called hobo jungles where poor men huddled around garbage-pail fires to keep warm, and even fairly widespread starvation. "Are you working?" and "Brother can you spare a dime?"[5] were common greetings. People who lived in collections of shacks made of cardboard, wood, and corrugated sheet metal scornfully referred to them as Hoovervilles. Although Herbert Hoover did eventually make a few halfhearted attempts to get the economy moving again, his greatest contribution to the economy was apparently his slogans. When he ran for the presidency in 1928, he promised "two cars in every garage" and "a chicken in every pot." As the Depression grew worse, he kept telling Americans that "prosperity is just around the corner." It's too bad he didn't have Frank Perdue in those days to stick a chicken in every pot.

Herbert Hoover and the Depression

[4]How the Department of Labor computes the unemployment rate is discussed in the chapter on economic fluctuations in *Economics* and *Macroeconomics.* In Chapter 2, we'll be looking at the concept of full employment, but you can grasp intuitively that when our economy enters even a minor downturn, we are operating at less than full employment.

[5]"Brother, Can You Spare a Dime?" was a depression era song written by Yip Harburg and Jay Gorney.

The New Deal

When Franklin D. Roosevelt ran for president in 1932, he promised "a new deal for the American people." Action was needed, and it was needed fast. In the first 100 days Roosevelt was in office, his administration sent a flurry of bills to Congress that were promptly passed.

The New Deal is best summarized by the three Rs: relief, recovery, and reform. Relief was aimed at alleviating the suffering of a nation that was, in President Roosevelt's words, one-third "ill-fed, ill-clothed, and ill-housed." These people needed work relief, a system similar to today's workfare (work for your welfare check) programs. About 6 million people, on average, were put to work at various jobs ranging from raking leaves and repairing public buildings to maintaining national parks and building power dams. Robert R. Russell made this observation:

> The principal objects of work-relief were to help people preserve their self-respect by enabling them to stay off the dole and to maintain their work habits against the day when they could again find employment in private enterprises. It was also hoped that the programs, by putting some purchasing power into the hands of workers and suppliers of materials, would help prime the economic pump.*

The government hoped that all this spending would bring about economic recovery, but the most lasting effect of the New Deal was reform. The Securities and Exchange Commission (SEC) was set up to regulate the stock market and avoid a repetition of the speculative excesses of the late 1920s, which had led to the great crash of 1929. After the reform, bank deposits were insured by the Federal Deposit Insurance Corporation (FDIC) to prevent future runs on the banks by depositors, like those experienced in the early 1930s. Also, an unemployment insurance benefit program was set up to provide temporarily unemployed people with some money to tide them over. The most important reform of all was the creation of Social Security. Although even today retired people need more than their Social Security benefits to get by, there is no question that this program has provided tens of millions of retired people with a substantial income and has largely removed workers' fears of being destitute and dependent in their old age.

*Robert R. Russell, *A History of the American Economic System* (New York: Appleton-Century-Crofts, 1964), p. 547.

Why did the downturn reverse itself?

Why did the downturn of August 1929 to March 1933 finally reverse itself? Well, for one thing, we were just about due. Business inventories had been reduced to rock-bottom levels, prices had finally stopped falling, and there was a need to replace some plant and equipment. The federal budget deficits of 1931 and 1932, even if unwillingly incurred, did provide a mild stimulus to the economy.

Franklin D. Roosevelt, thirty-second president of the United States (Franklin D. Roosevelt Library)

Clearly a lot of the credit must go to the new administration of Franklin D. Roosevelt, which reopened the banks, ran large budget deficits, and eventually created government job programs that put millions of Americans back to work (see box titled "The New Deal"). Recognizing a crisis in confidence, Roosevelt said, "The only thing we have to fear is fear itself." Putting millions of people back to work was a tremendous confidence builder. A 50-month expansion began in March 1933 and lasted until May 1937. Although output did finally reach the levels of August 1929, more than 7 million people were still unemployed.

By far, the most important reason for the success of the New Deal's first four years was the massive federal government spending that returned millions of Americans to work. This huge infusion of dollars into our economy was just what the doctor ordered. In this case, the doctor was John Maynard Keynes, the great English economist, who maintained that it didn't matter *what* the money was spent on—even paying people to dig holes in the ground and then to fill them up again—as long as enough money was spent. But in May 1937, just when it had begun to look as though the Depression was finally over, we plunged right back into it again.

The recession of 1937–38

What went wrong? Two things: First, the Federal Reserve Board of Governors, inexplicably more concerned about inflation than about the lingering economic depression, greatly tightened credit, making it much harder to borrow money. Second, the Roosevelt administration suddenly got that old balance-the-budget-at-all-costs religion. The cost of that economic orthodoxy—which would have made sense during an economic boom—was the very sharp and deep recession of 1937–38. Tight money and a balanced budget are now considered the right policies to follow when the economy is heating up and

prices are rising too quickly, but they are prescriptions for disaster when the unemployment rate is 12 percent.[6]

The ensuing downturn pushed up the official unemployment count by another 5 million, industrial production fell by 30 percent, and people began to wonder when this depression would ever end. But there really *was* some light at the end of the tunnel.

In April 1938, both the Roosevelt administration and the Federal Reserve Board reversed course and began to stimulate the economy. By June, the economy had turned around again, and this time the expansion would continue for seven years. The outbreak of war in Europe, the American mobilization in 1940 and 1941, and our eventual entry into the war on December 7, 1941, all propelled us toward full recovery.

When we ask what finally brought the United States out of the Great Depression, there is one clear answer: the massive federal government spending that was needed to prepare for and to fight World War II.

Part 4: From World War II to the Vietnam War

For most Americans the end of the Depression did not bring much relief, because the nation was now fighting an all-out war. For those who didn't get the message in those days, there was the popular reminder, "Hey, bub, don't yuh know there's a *war* goin' on?"

The country that emerged from the war was very different from the one that had entered it less than four years earlier. Prosperity had replaced depression. Now inflation had become the number one economic worry.

Globally, we were certainly at the top of our game. With just 7 percent of the world's population, we accounted for half the world's manufacturing output, as well as 80 percent of its cars and 62 percent of its oil. Our potential rivals, Japan, Germany, France, and the United Kingdom would need at least 15 years to repair their war-damaged industrial plant and begin competing again in world markets.

The United States and the Soviet Union were the only superpowers left standing in 1945. When the cold war quickly developed, we spent tens of billions of dollars to prop up the sagging economies of the nations of Western Europe and Japan, and we spent hundreds of billions more to provide for their defense. In the four decades since the close of World War II we expended 6 percent of our national output on defense, while the Soviet Union probably expended at least triple that percentage. This great burden certainly contributed to the collapse of the Soviet Union in 1990–91, and our own heavy defense spending continues to divert substantial resources that might otherwise be used to spur our economic growth.

The 1940s: World War II and Peacetime Prosperity

Just as the Great Depression dominated the 1930s, World War II was the main event of the 1940s, especially from the day the Japanese bombed Pearl Harbor until they surrendered in August 1945. For the first time in our history, we fought a war that required a total national effort. Although the Civil War had caused tremendous casualties and had set the South back economically for generations, we had never before fought a war that consumed half of our nation's total output.

At the peak of the war, more than 12 million men and women were mobilized and, not coincidentally, the unemployment rate was below 2 percent. Women, whose place was supposedly in the home, flocked to the workplace to replace the men who had gone off to war. Blacks, too, who had experienced great difficulty finding factory jobs, were hired to work in the steel mills and the defense plants in the East, the Midwest, and the West.

Between 1939 and 1944, national output of goods and services nearly doubled, while federal government spending—mainly for defense—rose by more than 400 percent. By

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[6]These policies will be discussed in later chapters of *Economics* and *Macroeconomics.*

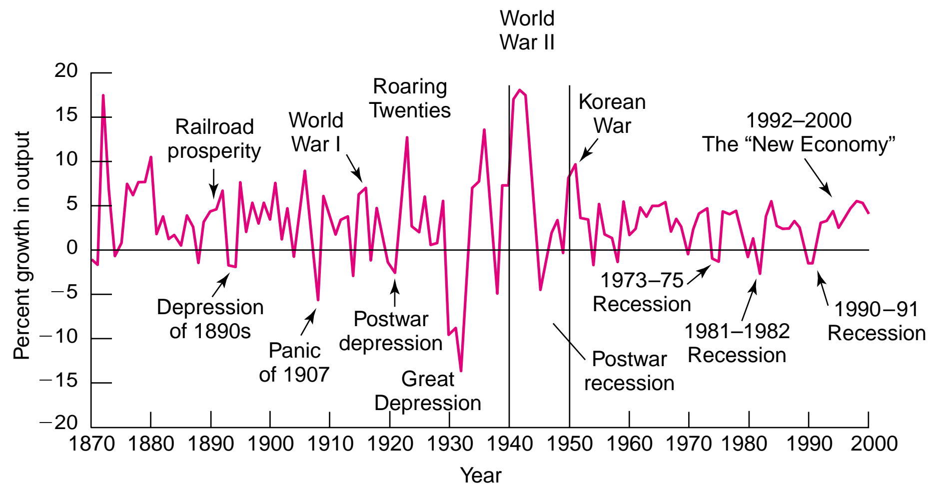

Figure 1

Annual Percentage Growth of U.S. Output of Goods and Services, 1870–2000

Although there were plenty of ups and downs, in most years output grew at a rate of between 2 and 5 percent. What stands out are the booms during World War I, the Roaring Twenties, the abortive recovery from the Great Depression (in the mid-1930s), World War II, and the late 1990s. The two sharpest declines in output occurred during the Great Depression and after World War II. The drop after World War II was entirely due to a huge cut in defense spending, but our economy quickly reconverted to producing civilian goods and services, so the 1945 recession was actually very mild.

Sources: U.S. Department of Commerce, AmeriTrust Company, Cleveland.

the middle of 1942, our economy reached full employment for the first time since 1929. To hold inflation in check, the government not only instituted price and wage controls but also issued ration coupons for meat, butter, gasoline, and other staples.

During the war, 17 million new jobs were created, while the economy grew 10 or 11 percent a year. Doris Kearns Goodwin attributed "a remarkable entrepreneurial spirit" not only to the opportunity to make huge wartime profits but to a competitiveness "developed within each business enterprise to produce better than its competitors to serve the country." A sign hanging in many defense plants read: "PLEDGE TO VICTORY: The war may be won or lost in this plant."[7]

The United States entered a very slight recession for a few months in 1945, as the economy underwent reconversion to put it on a peacetime footing. A somewhat longer, but still mild, downturn occurred from late 1948 through late 1949, but the decade was basically one of rapid economic expansion. (See box, "Post–World War II Recessions," for a description of each economic downturn since World War II.)

The suburbanization of America

Figure 1 provides a snapshot of U.S. economic growth since 1870.

Within a year after the war ended, some 12 million men and several hundred thousand women returned home to their civilian lives. Very little housing had been built during the war and the preceding depressed period, so most veterans lived in overcrowded houses and apartments, often with three generations under one roof. The first thing they wanted was new housing.

The federal government obligingly facilitated this by providing Veterans Administration (VA) mortgages at about 1 percent interest and often nothing down to returning veterans. The Federal Housing Administration (FHA) supplemented this program with FHA mortgages to millions of other Americans. Where were these houses built? In the suburbs. By 1945, little land was available in the cities, so suburbanization was inevitable.

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[7]Doris Kearns Goodwin, "The Way We Won: America's Economic Breakthrough during World War II," *The American Prospect,* Fall 1992, p. 68.

advanced WORK

Post–World War II Recessions

Since World War II, the United States has had 10 recessions of varying length and severity. The longest was from 1973–75, but the most severe was the 1981–82 recession.

February 1945—October 1945 Even though the war had not yet ended, we began to reconvert into peacetime production. This process was relatively painless, and the recession was perhaps the mildest in the last six decades.

December 1948—October 1949 This was another very mild downturn, really a pause after consumers had satisfied their pent-up demand for cars, major appliances, and new homes.

August 1953—May 1954 A decline in defense spending after the end of the Korean War and a reduction in business inventories built during the last months of the war were the main culprits. This was the third mild recession in a row.

August 1957—April 1958 Business, which had been flat from early 1956 through the summer of 1957, finally sank into a recession. Although brief, the decline was rapid. Investment in plant and equipment fell sharply, but spending by consumers fell only slightly. This was the worst recession since the Great Depression, but it ended in just nine months.

April 1960—February 1961 A long steel strike in 1959 and a swing to a balanced federal budget set off this very mild recession. National output fell almost imperceptibly.

December 1969—November 1970 This was another very mild downturn with another almost imperceptible decline in national output. The downturn coincided with an automobile strike and a strike at General Electric.

November 1973—March 1975 This was the worst downturn since the end of the Great Depression. It was set off by a fourfold increase in the price of oil engineered by the OPEC nations (which we'll talk a lot more about in the chapter on economic fluctuations in *Economics* and *Macroeconomics*). Simultaneously, there was a worldwide shortage of foodstuffs, which drove up food prices. To make matters worse in this country, we struck a deal to export about one-quarter of our wheat and other grains to the Soviet Union. Output fell about 5 percent, and, to make matters still worse, the rate of inflation remained unacceptably high.

January 1980—July 1980 A doubling of oil prices by OPEC and a credit crunch set off by the Federal Reserve Board of Governors, which had been alarmed by an inflation rate that had reached double-digit levels, pushed us into a very brief, but fairly sharp, recession. When interest rates rose above 20 percent, the Federal Reserve allowed credit to expand and the recession ended.

August 1981—November 1982 This downturn was also set off by the Federal Reserve, which was now determined to wring inflation out of our economy. By the end of the recession—which now held the dubious distinction of being the worst downturn since the Great Depression—the unemployment rate had reached almost 11 percent. But the inflation rate had been brought down, and in late summer 1982, the Federal Reserve once again eased credit, setting the stage for the subsequent recovery. At the same time, the federal government had been cutting income tax rates, further helping along the business upturn.

July 1990—March 1991 After the longest uninterrupted peacetime expansion in our history, a fairly mild downturn was caused by a combination of sharply rising oil prices (due to Iraq's invasion of Kuwait on August 2 and the ensuing Persian Gulf War), tight money, and a deficit-cutting budget agreement between President George Bush and Congress in October. The agreement, which called for a package of tax increases and federal government spending reductions totaling nearly $500 billion over five years, was supposed to bring down the deficit. What it *did* was make the recession somewhat worse than it might otherwise have been and also retard the ensuing recovery. President Bush himself termed the recovery "anemic," and its slow pace was largely responsible for his loss of the 1992 election to Bill Clinton. Unemployment continued to rise—to a peak of 7.8 percent—well into the recovery, which took an unusually long 18 months. Indeed, it was not until the very last week of 1992 that economists were certain that the recession was over and that we had fully recovered.

And how would these new suburbanites get to work? By car. Thus more highways were needed. Once again, the federal government stepped in. Before long a federally subsidized interstate highway network was being built, along with thousands of state and local highways, parkways, and freeways, as well as local streets and roads.

Hence the late 1940s and the 1950s were one big construction boom. Highway building and home construction provided millions of jobs. The automobile industry, too, was prospering after a total shutdown during the war. In the postwar era, we not only supplied all the new suburbanites with cars, but we also became the world's leading auto exporter. The industrial plants of West Germany and Japan had been destroyed or damaged during the war; it wasn't until the mid-1960s that those nations reentered the world market, and it took them another decade to capture more than 10 percent of the American car market.

The returning veterans, like the nation, had a lot of catching up to do. Couples had been forced to put off having children, but after the war the birthrate shot up and stayed high until the mid-1960s. This baby boom and low gasoline prices added impetus to the nation's suburbanization. Why continue to live in cramped urban quarters when a house in the suburbs was easily affordable?—as it was to most middle-class and working-class Americans (see box titled "Levittown, U.S.A.").

In 1944 Congress passed the GI Bill of Rights, which not only offered veterans mortgage loans, as well as loans to start businesses, but also provided monthly stipends for veterans who wanted help with educational costs. By 1956, when the programs ended, 7.8 million veterans, about half of all who had served, had participated. A total of 2.2 million went to college, 3.5 million to technical schools below the college level, and 700,000 to agricultural instruction of farms. The GI bill made college affordable to men from working-class and lower-middle-class backgrounds and was almost entirely responsible for enrollments more than doubling between 1940 and 1949.

The only jarring economic notes were very minor recessions in 1945 and 1948–49 (see again the box titled "Post–World War II Recessions") and a serious bout of inflation

Levittown, U.S.A.

Levittown, Long Island, a tract development of 17,000 nearly identical homes, was built right after World War II, largely for returning veterans and their families. These 800-square-foot, prefabricated homes sold for $8,000 each, with no down payment for veterans. William Levitt described the production process as the reverse of the Detroit assembly line:

> There, the car moved while the workers stayed at their stations. In the case of our houses, it was the workers who moved, doing the same jobs at different locations. To the best of my knowledge, no one had ever done that before.*

Levittown became the prototype of suburban tract development, and the Levitts themselves built similar developments in New Jersey, Pennsylvania, and Maryland. And so, while tens of millions of Americans were able to move into new suburban homes in the decades after World War II, a popular cartoon of the 1950s depicted this scene: Ten men with briefcases are getting out of their cars. Ten identical dogs rush out of 10 identical homes to greet them while 10 wives, each with two children, wait at the front doors.

In 1963, civil rights demonstrations targeted William Levitt's housing development in Bowie, Maryland. Levitt admitted he had refused to sell houses to black families, because, he said, integrating his developments would put him at a competitive disadvantage. Levitt's discriminatory sales policy was no different from most other developers, who did not relent until well into the 1960s, when government pressure forced them to do so. To this day, most of the communities built by the Levitts remain overwhelmingly white.

Of course racism was hardly confined to developers like Levitt. James T. Patterson, a historian, wrote that the Federal Housing Administration "openly screened out applicants according to its assessment of people who were 'risks.'"† These were mainly blacks, Jews, and other "unharmonious racial or nationality groups." In so doing it enshrined residential segregation as a public policy of the United States government.

*Eric Pace, "William J. Levitt, 86, Pioneer of Suburbs, Dies," *New York Times,* January 29, 1994, p. A1.

†James T. Patterson, *Grand Expectations* (New York: Oxford University Press, 1997), p. 27.

immediately after the war when consumer prices rose 35 percent in three years. Then, just when inflation had been brought under control, the Korean War, which the country entered in June 1950, brought on another wave of price increases.

The 1950s: The Eisenhower Years

The economy was further stimulated by the advent of television in the early 1950s, as well as by the Korean War. It didn't really matter what individual consumers or the government spent their money on, as long as they spent it on something.

Eisenhower would end the war and end the inflation.

General Dwight D. Eisenhower, one of the great heroes of World War II, made two key promises in his 1952 campaign for the presidency: He would end the war in Korea, and he would end the inflation. Eisenhower made good on both promises. Although three recessions occurred during his eight years in office, the country continued to suburbanize, and economic growth, although not as fast as it had been in the 1940s, was deemed satisfactory by most Americans (see the box "The Consequences of Suburbanization").

What may be most significant about the Eisenhower years is what *didn't* happen rather than what did. Eisenhower made no attempt to undo the legacies of the New Deal such as Social Security, unemployment insurance, or the regulatory reforms that had been instituted. The role of the federal government as a major economic player had become a permanent one. Twenty-eight years later, when President Ronald Reagan left office after having paid great lip service to "getting the government off the backs of the American people," that role had grown even greater.

The Soaring Sixties: The Years of Kennedy and Johnson

When John F. Kennedy ran for president in 1960, the country was mired in the third Eisenhower recession. Kennedy pledged to "get the country moving again." The economy *did* quickly rebound from the recession and embarked on an uninterrupted eight-year expansion. An assassin shot Kennedy before he could complete his first term; he was succeeded by Lyndon Johnson, who in his first speech as president stated simply, "Let us continue." A major tax cut, which Kennedy had been planning, was enacted in 1964 to stimulate the economy. That and our growing involvement in the Vietnam War helped bring the unemployment rate down below 4 percent by 1966. But three major

The Consequences of Suburbanization

Suburbanization was the migration of tens of millions of middle-class Americans—nearly all of them white—from our nation's large central cities to newly developed suburban towns and villages. Instead of getting to work by public transportation, these commuters now went by car. Truck transport replaced railroads as the primary way to haul freight. Millions of poor people—the large majority of whom were black or Hispanic—moved into the apartments vacated by the whites who had fled to the suburbs.

Suburbanization left our cities high and dry. As middle-class taxpayers and millions of factory jobs left the cities, their tax bases shrank. There were fewer and fewer entry-level jobs for the millions of new arrivals, largely from the rural South. Throughout the 1950s, 1960s, and 1970s, a huge concentration of poor people was left in the cities as the middle-class workers—both black and white—continued to flee to the suburbs. By the mid-1970s, the inner cities were rife with poverty, drugs, and crime, and had become socially isolated from the rest of the country.

Still other consequences of suburbanization were our dependence on oil as our main source of energy and eventually, our dependence on foreign sources for more than half our oil. Indeed, America's love affair with the automobile has not only depleted our resources, polluted our air, destroyed our landscape, and clogged our highways but also has been a major factor in our imbalance of trade.*

*The damage we are doing to our nation's environment and to that of our planet is alarming, but discussing it goes beyond the scope of this book. However, in the chapter on international trade, we do have a lengthy discussion of our trade imbalance and how our growing oil imports have contributed to it.

spending programs, all initiated by Johnson in 1965, have had the most profound long-term effect on the economy: Medicare, Medicaid, and food stamps.

However, as the federal deficit mounted and as the money supply grew too quickly, another round of inflation began; it was not brought under control until the mid-1980s.

Part 5: From the Vietnam War to the Breakup of the Soviet Empire

Our country has been at relative peace—with the exceptions of the very brief wars against Iraq in 1990–91 and Serbia in 1999—since our withdrawal from Vietnam in the early 1970s. Nevertheless, we have continued to spend over 3 percent of our national output on defense. With the breakup of the Soviet Union and its Eastern European military alliance came great hopes of a "peace dividend," but the government has made only minimal cuts in defense spending since 1990, and these hopes have been receding.

The Sagging Seventies: The Stagflation Decade

In 1968, Richard Nixon said he had a plan to end the Vietnam War and to bring inflation under control. Soon after taking office, he was greeted by a relatively minor recession (see again the box titled "Post–World War II Recessions"), but his main problem was with inflation. On August 15, 1971, Nixon suddenly announced wage and price controls, but these were applied halfheartedly and did not seem to make much of an impact. Nevertheless, Nixon was reelected by a landslide in 1972, though by then he seemed unwilling or unable to get our economy back on course—perhaps because he had other things to worry about, such as getting impeached.

Stagnation + inflation = stagflation.

The 1970s brought Americans crashing back to economic reality. In 1973, we were hit by the worst recession since the 1930s. This came on the heels of an oil price shock: The Organization of Petroleum Exporting Countries (OPEC) had quadrupled oil prices in the fall of 1973, and by then, too, we were mired in double-digit inflation, an annual rate of increase in prices of at least 10 percent. About the only good thing during this period was that we were able to add a new word to our vocabularies—*stagflation.* The first part of this word is derived from stagnation. Our rate of economic growth, which had been fairly rapid for 25 years after World War II, had slowed to a crawl. Usually when this happened, prices would stop rising or would at least slow their rate of increase. But now the opposite had happened: We had a bad case of inflation, which gave us the second part of the word *stagflation.*

Nixon's successor, Gerald Ford, did have a little success with respect to inflation, although his main weapon seemed to be a button he liked to wear that said WIN, which stood for "Whip Inflation Now."

Jimmy Carter's economic problems

The president who seemed to have the worst economic luck of all was Jimmy Carter. He presided over mounting budget deficits that, coupled with a rapid growth of the money supply, pushed up the inflation rate to nearly double-digit levels. And then suddenly, in 1979, the Iranian revolution set off our second oil shock. Gasoline prices went through the ceiling, rising from about 70 cents a gallon to $1.25 in June and July of that year.

Alarmed at the inflation rate, which had nearly doubled in just three years, the Federal Reserve literally stopped the growth of the money supply in October 1979. By the following January we were in another recession, while the annual rate of inflation reached 18 percent. Talk about stagflation!

Still another disturbing development was a slowing of our nation's productivity growth, or output per hour worked. By the late 1970s, it had dropped to only 1 percent,

just about one-third its postwar rate.[8] Until we found a way to boost our productivity, our economy would continue to stagnate.

The 1980s: The Age of Reagan

Ronald Reagan, who overwhelmingly defeated incumbent Jimmy Carter in the 1980 presidential election, offered the answers to our most pressing economic problems. For too long, he declared, we had allowed the federal government to "tax, tax, tax, spend, spend, spend." Big government was not the answer to our problems. Only private enterprise could provide meaningful jobs and spur economic growth. If we cut tax rates, said Reagan, people would have more incentive to work, output would rise, and inflation would subside. After all, if inflation meant that too many dollars were chasing too few goods, why not produce more goods?

Supply-side economics

This brand of economics, supply-side economics, was really the flip side of Keynesian economics. Both had the same objective: to stimulate output, or supply. The Keynesians thought the way to do this was to have the government spend more money, which, in turn, would give business firms the incentive to produce more. The supply-siders said that if tax rates were cut, people would have more of an incentive to work and would increase output.

Personal income taxes were cut by a whopping 23 percent in 1981 (stretched over a three-year period), and business taxes were also slashed. This was the heart of the supply-side program.

In January 1981, it was Ronald Reagan's ball game to win or lose. At first he seemed to be losing. He presided over still another recession, which, by the time it ended, was the new postwar record holder, at least in terms of length and depth. The second-worst recession since World War II had been that of 1973–75. But the 1981–82 recession was a little longer and somewhat worse.

The recession of 1981–82

By the end of 1982, the unemployment rate reached nearly 11 percent, a rate the country had not seen since the end of the Depression. But on the upside, inflation was finally brought under control. In fact, both the inflation and unemployment rates fell during the next four years, and stagflation became just a bad memory.

Still, some very troubling economic problems surfaced during the period. The unemployment rate, which had come down substantially since the end of the 1981–82 recession, seemed stuck at around 6 percent, a rate that most economists consider to be unacceptably high. A second cause for concern was the megadeficits being run by the federal government year after year. Finally, there were the foreign trade deficits, which were getting progressively larger throughout most of the 1980s.

"Read my lips."

In 1988, George Bush, who had served as Reagan's vice president for eight years and claimed to be a convert to supply-side economics, made this famous campaign promise: "Read my lips: no tax increase." Of course, the rest is history. Bush won the election, and a couple of years later, in an effort to reduce the federal budget deficit, he agreed to a major tax increase. Not only did his words come back to haunt him when he ran for reelection in 1992, but the deficit continued to rise. And to completely ruin his party, we suffered a lingering recession that began in the summer of 1990 and from which we did not completely recover until the end of 1992, with the unemployment rate still hovering above 7 percent.

The budget deficit had become a concern. When Ronald Reagan took office in 1981, the deficit was $79 billion, but just 11 years later it had climbed to $290 billion. We'll return to the deficit and the humongous national debt in the chapter on fiscal policy in *Economics* and *Macroeconomics.*

[8]Productivity is output per hour worked, a concept we'll examine further in a chapter on economic growth and productivity in *Economics* and *Macroeconomics* and a chapter on unions, labor markets, and wage rates in *Economics* and *Microeconomics.*

Part 6: To the Millennium and Beyond

How would you grade our economic performance since the end of the 1990–91 recession (see box, "Post–World War II Recessions" on page 15.)? I'd give it an A-minus, with several areas that need improvement. Let's look at those first, and then we'll move on to what has been termed the "new economy."

The Military

All our major wars have had very strong influences on our economy, generally setting off bouts of inflation and often speeding up our economic growth and reducing our unemployment as well. But our country has been more or less at peace since the early 1970s, when we withdrew from Vietnam.

Although defense spending continues at more than $300 billion, for the first time in at least six decades, our nation has virtually no military rivals. So the question is What do we need to spend for a modern, high-tech, and more mobile military that can respond to an emergency?

The debate today is why, since the fall of the Berlin Wall and the demise of the Soviet Union, we need to divert so much of our resources to defense. These resources might otherwise be used to ameliorate our many social and economic problems—areas that clearly need improvement.

Real Wages

Economists use the term "real wages" to let us know how much we can buy with our wages after allowing for inflation. For example, if you earned 20 percent more than you did last year, but prices also went up by 20 percent, then your wages just kept up with inflation, and you could buy about the same amount of goods and services as you did last year. Despite all our economic growth, real wages for most workers today are actually slightly lower than they were back in 1973. In that year, urban wage earners and clerical workers earned $8.55 an hour (in real wages paid in dollars of the year 1982 purchasing power). By November of 2000 these workers averaged only $7.96[9].

Why have real wages fallen since 1973? There are numerous explanations. Plant closings and corporate downsizing have done away with millions of well-paid jobs. (See box, "The New Vocabulary of Corporate Downsizing.") The weakening of labor unions and the alternative of cheaper workers abroad have exerted downward pressure on wages. Still another factor has been the increasing tendency of business to replace full-time workers with temporary and part-time employees. Apparently almost one-third the new jobs our economy has generated since 1991 have been part-time or temporary.

The State of American Agriculture

The story of American agriculture is the story of vastly expanding productivity. The output of farm labor doubled between 1850 and 1900, doubled again between 1900 and 1947, and doubled a third time between 1947 and 1960. In 1800 it took 370 hours to produce 100 bushels of wheat. By 1960 it took just 15 hours. In 1820 one farmer could feed 4.5 people. Today that farmer could feed about 100 people.

While agriculture is one of the most productive sectors of our economy, only about 4.5 million people live on farms today, and less than half of them farm full time. Despite hundreds of billions of dollars in price-support payments to farmers for crops in the years

[9]Economic Report of the President, 2001, p330.

The New Vocabulary of Corporate Downsizing

It may be no consolation to the millions of Americans who have been "downsized" during the 1990s, but this phenomenon has certainly enriched our vocabulary. Here is some of the euphemistic new corporate lingo that tries to put a positive spin on these massive layoffs.

AT&T—"Force management program"

Bank of America—"Release of resources"

Bell Labs—"Involuntary separation from payroll"

Clifford of Vermont—"Career-change opportunity"

Digital Equipment Corp.—"Involuntary severance"

GM—"Career-transition program"

Harris Bank of Chicago—"Rightsizing the bank"

National Semiconductor—"Reshaping"

Newsweek—"Reduction in force (RIF)"

Pacific Bell—"Elimination of employment security policy"

Procter & Gamble—"Strengthening global effectiveness"

Stanford University—"Repositioning"

Stouffer Foods Corp.—"Schedule adjustments"

Tandem Computers—"Reducing duplication or focused reduction"

Wal-Mart—"Normal payroll adjustment"

Source: Compiled by William Lutz, appearing in *Newsweek,* August 12, 1996, p. 57.

since World War II, the family farm is rapidly vanishing. This is certainly ironic, since the primary purpose of these payments has been to save the family farm. During the more than six decades that this program has been in operation, 7 out of every 10 family farms have disappeared, while three-quarters of the payments go to large corporate farms. One by one, the dairy farmers, the poultry farmers, the grain growers, and the feedlot operators are being squeezed out by the huge agricultural combines.

If you were to ask, the overwhelming majority of farmers would tell you that the state of American agriculture is not good. Mainly because of overproduction, prices are way down, and we have been in a farm recession—some would say depression—since 1997. For example, a farmer in early 2001 was getting just $1 for a 100-pound sack of potatoes, down from $8 a few years earlier, and well below the $5 needed to cover the cost of production. Wheat farmers would lose about $2 on every bushel of wheat they grow if they brought it to market. Even though the Freedom to Farm Act of 1996 stipulated drastically reduced payments to farmers, as crop prices sank to 10- and 20- year lows in 2000, payments to farmers were a record $28 billion, about half of all farm income.

While we have lingering images of family farms, large farms—those with more than $250,000 in sales—now account for more than three-quarters of all agricultural sales. In the mid-1980s, their share was actually less than half. To keep costs down, especially when growing corn, wheat, and soybeans, a farmer needs a lot of expensive equipment and, consequently, must plant on a huge acreage.[10] In other words, you've got to become big just to survive.

American farms are so productive that we often export more than one-third of our corn, wheat, and other crops. And yet millions of Americans go to bed hungry every night. Back in the depths of the Great Depression, hungry Americans resorted to soup kitchens for their only meals. Today some 35 million Americans make use of food pantries, soup kitchens, and other food distribution programs.

[10]The average farm has gone from 139 acres in 1910 to 435 acres today.

Other Social and Economic Problems

Even in extremely good economic times, ours is a society beset with monumental problems. Crime, drugs, the disposal of nuclear waste, the permanent underclass, and our decaying central cities are largely neglected issues. After years of neglect, our interstate highway network remains, at best, a work-in-progress, highlighted by those orange signs, plastic barrels, flashing arrows, and one-lane stretches that seem to have become a permanent part of our landscape. And we have become a nation of consumption junkies who have run up a public and private debt exceeding $20 trillion—more than twice the value of our annual national output.

On a personal level, you might be asking: Will I be able to find a decent job when I graduate? Will I be able to live as well as my parents did? Or will I have to live with them because I won't be able to afford a place of my own? Will I be able to collect Social Security benefits when I retire, or will the whole system go bankrupt before then?

Which company is the largest employer in the U.S.A.? General Motors? Exxon? Wal-Mart? Do you give up? Our largest employer is Manpower, Inc., a temporary employment agency. And temp agencies like Manpower are our future. Bank of America, which has been cutting the number of its full-time employees for years, hopes to soon reach its goal of having 80 percent of its staff made up of part-time employees working less than 20 hours a week—and ineligible for benefits like medical insurance. Indeed, some 45 million Americans have no medical insurance coverage.

Less than 20 years ago we were the world's largest creditor nation, but now we're the largest debtor. We are steadily losing our manufacturing base (although still the world's largest manufacturer), while hemorrhaging millions of well-paid blue-collar jobs. Our educational system turns out 1 million functional illiterates every year, but we still have the best college and university system in the world (more than half a million foreign students are enrolled). More than one in 10 Americans is officially classified as poor, and there is a growing permanent underclass of hundreds of thousands of fourth- and fifth-generation welfare families. All this exists despite the passage of the Welfare Reform Act of 1996, which we'll discuss in the chapter on income distribution and poverty near the end of the book. And even though we hold 2 million people in prison, many of our streets remain unsafe, and drug dealers operate with impunity.

The "New Economy" of the Nineties

"We've never been better off, but can America keep the party going?"
—Jonathan Alter, *Newsweek,* February 7, 2000.

What exactly *is* the "new economy"? And is it really all that new? It is a period marked by major technological change, low inflation, low unemployment, and rapidly growing productivity. Certainly that is a fair description of the 1990s, but one may ask if other decades—the 1920s and most of the 1960s—might be similarly described. Perhaps judging the appropriateness of the term "new economy" might best be left to the economic historians of the future. But new or not new, the 1990s will surely go down in history as one of the most prosperous decades since the founding of the republic.

The new economy could trace its beginning back to the late 1970s when the federal government began an era of deregulation, giving the market forces of supply and demand much freer reign. In the 1980s federal income tax rates were slashed, allowing Americans to keep much more of their earnings, thereby providing greater work incentives. But the 1980s and early 1990s also saw a huge increase in federal budget deficits; economic growth was lagging, and inflation, while no longer of double-digit proportions, was still a major concern.

As the decade of the 1990s wore on, the economic picture grew steadily brighter. The deficit was reduced each year from 1993 through the end of the decade, by which time we were actually running budget surpluses. Inflation was completely under control, and an economic expansion that began in the spring of 1991 reached boom proportions by the last years of the decade. Optimism spread as the stock market soared, and by February, 2000, the length of our economic expansion reached 107 consecutive months—an all-time record.

The 1990s was the decade of computerization. In 1990 only a handful of households were on the Internet; by the end of 2000, about 40 percent were connected. Much more significant was the spread of computerization in the business world. Indeed, there is a terminal on almost every desk. Planes, cars, factories, and stores are completely computerized. All this has clearly made the American labor force a lot more efficient. Economists, as well as ordinary civilians, believe that our rapid economic growth has been largely the result of computerization of the workplace.

Economists also agree that competition spurs economic performance, and the flood of imports—ranging from cars and camcorders to computer chips and calculators—has pushed American firms into operating more efficiently, producing better products, and holding down their prices. Today American automobiles are considered, on the whole, virtually the equal of Japanese automobiles. That clearly was not the case just 10 or 15 years ago. And who benefits the most from all this competition? You guessed it: the American consumer.

Through most of the 1990's and well into the new millennium, consumers were spending money as if there were no tomorrow. This consumption binge has led to a growing trade deficit, which is now about $360 billion. As long as foreigners gladly accept our dollars, using most of them to buy up American stocks, bonds, real estate, and occasionally whole corporations, we should not have too much to worry about. But this cannot go on indefinitely, if only because, at some point, we won't have anything left to sell. We'll have a lot more to say about this problem in the last two chapters of the book.

The 1990s are often compared to the 1920s. In both decades the stock market soared, and many great fortunes were made. But in the 1920s only one in 10 Americans owned corporate stock. Today more than half our population owns stock, either through individual portfolios or mutual funds or pension funds. And there is strong political support to shift at least a fraction of the Social Security trust fund into corporate stocks. Such widespread stock ownership shows great public confidence that the market will continue to rise and that our economic boom will continue indefinitely.

Like the 1920s, the 1990s was a decade of great prosperity, some of which was fueled, as mentioned, by a spectacularly rising stock market. As we approached the new millennium, many people wondered if history would repeat itself. Would a stock market crash usher in another Great Depression?

Obviously it didn't happen—at least so far. Although the stock market had its share of ups and downs in 1999 and after, there was no crash, and certainly there was no depression. What kind of economy can we look forward to as the 21st century unfolds? As you continue reading, you'll make your own informed guess as to what lies ahead. And, quite frankly, your guess may be as good as mine.

Back in 1941 Henry Luce, the founder of *Life Magazine,* wrote an editorial, "The American Century." History has certainly proven Luce right. Not only had American soldiers and economic power won World Wars I and II, but we also contained communism from the 1940s through the 1980s. With the collapse of the Soviet Union, we were the only military and economic superpower left standing.

As we move farther into the 21st century, we continue to dominate the global economy. Someday our dominance may be challenged, perhaps by the European Union, Japan, or even by China. But if Henry Luce were alive today, he might well predict that we are now entering the second American century.

By the spring of 2001 there were some clouds on our economic horizon. The stock market had given up its huge gains of the previous two or three years, and Americans were growing increasingly pessimistic about the immediate future. Economic growth had slowed markedly during the second half of 2000, and there was still uncertainty among economic forecasters if this slowdown would degenerate into a full blown recession.

President Reagan used to say that, rather than fight over how the economic pie gets divided, let's just bake a bigger pie. Economics deals with how large a pie we bake (we call this production) and how that pie gets sliced up (which is distribution).

To bake a pie, you start with ingredients. The ingredients of our economic pie are our resources—land, labor, capital, and entrepreneurial ability—which we'll cover in the next chapter.

Questions for Further Thought and Discussion

1. Describe, in as much detail as possible, the impact of the Great Depression on the lives of those who lived through it. If you know anyone who remembers the 1930s, ask him or her to describe those times.
2. What were the main agricultural developments over the last two centuries?
3. How have wars affected our economy? Use specific examples.
4. Inflation has been a persistent problem for most of the 20th century. What were some of its consequences?
5. In what ways were the 1990s like the 1920s, and in what ways were the two decades different?
6. Although our economy has performed well during the last 10 years, there have been some major problems. Identify and discuss a few of these problems.
7. When our country was being settled, there was an acute shortage of agricultural labor. Over the last hundred years millions of Americans have left the farms. How have we managed to feed our growing population with fewer and fewer farmers?
8. Today America has the world's largest economy as well as a very high standard of living. What factors in our economic history helped make this possible?
9. List the main ways the "new economy" (since the early 1990s) differs from the "old economy."

Workbook for Chapter 1

Name ________________________________ Date ____________

Multiple-Choice Questions

Circle the letter that corresponds to the best answer.

1. Which statement is true?
   a) Twenty-five million Americans were officially unemployed in 1933.
   b) Our economy expanded steadily from 1933 to 1945.
   c) Once the Great Depression began in 1929, our economy moved almost steadily downhill until the beginning of 1940.
   d) None of the above.

2. In the early 19th century, the United States suffered from a scarcity of
   a) land and labor
   b) land—relative to labor
   c) labor—relative to land
   d) neither land nor labor

3. Which statement is false?
   a) President Eisenhower presided over three recessions.
   b) Our economy has not had an unemployment rate below 5 percent since the early 1940s.
   c) There were six straight years of economic expansion under President Reagan.
   d) None of the above. (All of the above are true.)

4. Which statement is true?
   a) There was a great deal of stagflation in the 1970s.
   b) We had full employment for most of the 1980s.
   c) We have had seven recessions since World War II.
   d) None of the above.

5. Each of the following were elements of the New Deal except __________.
   a) relief, recovery, reform
   b) a massive employment program
   c) unemployment insurance and bank deposit insurance
   d) a balanced budget

6. Which of these best describes the post-World War II recessions in the United States?
   a) They were all very mild, except for the 1981–82 recession.
   b) They were all caused by rising interest rates.
   c) None lasted more than one year.
   d) Each was accompanied by a decline in output of goods and services and an increase in unemployment.

7. At the time of the American Revolution, about __________ of every 10 Americans lived on a farm.
   a) one
   b) three
   c) five
   d) seven
   e) nine

8. Between 1939 and 1944, federal government spending rose by __________.
   a) 100%
   b) 200%
   c) 300%
   d) 400%
   e) 500%

9. Each of the following was a year of high unemployment except __________.
   a) 1933
   b) 1938
   c) 1944
   d) 1975
   e) 1982

10. The year 2000 could be described as having had a relatively __________ unemployment rate and a relatively __________ rate of inflation.
    a) low, low
    b) high, high
    c) high, low
    d) low, high

11. Between 1929 and 1933, output fell __________.
    a) by about one-tenth
    b) by about one-third
    c) by about one-half
    d) by about two-thirds

12. The inflation rate declined during the presidency of __________.
    a) both Eisenhower and Reagan
    b) neither Eisenhower nor Reagan
    c) Reagan
    d) Eisenhower

13. Our national output is __________ that of Japan.
a) one-half
b) a little smaller than
c) a little larger than
d) almost twice

14. The transcontinental railroads completed in the 1860s, 1870s, and 1880s all bypassed the __________.
a) Northeast
b) Midwest
c) South
d) mountain states
e) Far West

15. Which best describes the American economy at the end of the 20th century?
a) high growth, low inflation, and low unemployment
b) low growth, high inflation, and high unemployment
c) Except for a few million poor people, almost all Americans were prospering
d) large federal budget deficit and a recession

16. The longest economic expansion in our history began in __________.
a) the spring of 1961
b) the winter of 1982
c) the spring of 1991
d) the fall of 1993

17. The age of the great industrial capitalists like Carnegie, Rockefeller, and Swift was in the __________.
a) second quarter of the 19th century
b) third quarter of the 19th century
c) fourth quarter of the 19th century
d) first quarter of the 20th century
e) second quarter of the 20th century

18. We had a business downturn at the end of, or soon __________.
a) after World War I and World War II
b) after neither World War I nor World War II
c) after World War II but not World War I
d) after World War I but not World War II

19. Medicare and Medicaid were inaugurated under the administration of __________.
a) Franklin Roosevelt
b) Harry Truman
c) Dwight D. Eisenhower
d) John F. Kennedy
e) Lyndon B. Johnson

20. Most of the recessions since World War II lasted __________.
a) less than 6 months
b) 6 to 12 months
c) 12 to 18 months
d) 18 to 24 months
e) 24 to 36 months

21. Which statement is true?
a) President Eisenhower attempted to undo most of the New Deal.
b) There was a major tax cut in 1964.
c) The federal budget deficit was reduced during President Lyndon Johnson's administration.
d) None of the above.

22. There was a major tax cut in __________.
a) both 1964 and 1981
b) neither 1964 nor 1981
c) in 1964, but not in 1981
d) in 1981, but not 1964

23. Our economic growth began to slow markedly __________.
a) in the early 1940s
b) in the early 1960s
c) in the early 1970s
d) between 1982 and 1985

24. Wage and price controls were introduced by President __________.
a) Eisenhower
b) Kennedy
c) Johnson
d) Nixon
e) Ford

25. In the 1970s, our economy suffered from __________.
a) inflation but not stagnation
b) stagnation but not inflation
c) inflation and stagnation
d) neither inflation nor stagnation

26. The recession of 1990–91 was __________, and the ensuing recovery was __________.
a) deep, slow
b) deep, fast
c) shallow, slow
d) shallow, fast

27. Our longest uninterrupted economic expansion took place mainly in the decade of the __________.
a) 1940s
b) 1950s
c) 1960s
d) 1970s
e) 1980s
f) 1990s

28. Since the end of the 1990–91 recession, our economy has generated more than __________ million additional jobs.
    a) 5   b) 10   c) 15   d) 20

29. Compared to today, in 1945, __________.
    a) our economy was plagued by high unemployment and slow economic growth
    b) we faced much greater competition from our economic rivals in Europe and Asia
    c) we were a much more dominant global economic power
    d) we accounted for almost one-quarter of the world's manufacturing output and slightly more than one-third of its output of automobiles.

Fill-In Questions

1. The low point of the Great Depression was reached in the year __________.

2. In 1790, about __________ of every 10 Americans lived on farms.

3. The worst recession we had since World War II occurred in ________________________________.

4. The country with the world's largest output is ______ ____.

5. In 1933, our official unemployment rate was __________%.

6. Bills providing for Medicare and Medicaid were passed during the administration of President __________.

7. Today one American farmer feeds about __________ ________________________ people.

8. During President Dwight D. Eisenhower's two terms, there were ________________________ recessions.

9. Rapid technological change in agriculture during the first half of the 19th century was brought on mainly by ________________________________.

10. The main factor in finally bringing us out of the Great Depression was ________________________________.

11. Since World War II there have been __________ recessions.

12. The quarter century that was completely dominated by the great industrialists like Andrew Carnegie and John D. Rockefeller began in the year __________.

13. Passage of the ____________________ in 1944 enabled nearly 8 million veterans to go to school.

14. The __________ century was termed the "American Century."