

## Keeping Score: *Is my economy bigger than your economy?*

From: Naked Economics by Charles Wheelan

As I have mentioned, in the late 1980s I was a young speech writer working for the governor of Maine. One of my primary responsibilities was finding jokes. "Funny jokes," he would admonish me. "Belly laughs, not chuckles." More than a decade later, one of those jokes stands out, not so much because it is funny now, but rather for what it tells us about what we were thinking then. Recall that George Bush, Sr., was president and Dan Quayle was vice president. New England was in the midst of an economic slump and Maine was particularly hard hit. Meanwhile, Japan appeared to be the world's economic powerhouse. The joke goes like this:

While vacationing at Kennebunkport, George Bush is hit on the head with one of his beloved horseshoes. He slips into a coma. Nine months later, he awakes and President Quayle is standing at his bedside.

"Are we at peace?" Mr. Bush asks.

"Yes. The country is at peace," says President Quayle.

"What is the unemployment rate?" Mr. Bush asks.

"About 4 percent," says President Quayle.

"Inflation?" queries Mr. Bush.

"Under control," says President Quayle.

"Amazing," says Mr. Bush. "How much does a loaf of bread cost?"

President Quayle scratches his head nervously and says, "About 240 yen."

*Believe* it or not, that was good for a *belly* laugh. Some of the humor derived from the prospect of Dan Quayle as president, but mostly it was an outlet for anxiety over the popular notion that Japan was on the brink of world economic domination. Obviously times change. We now know that Japan went on to suffer from more than a decade of economic stagnation while the United States moved into what would become the longest economic expansion in the nation's history. The Nikkei Index, which reflects prices on the Japanese stock market, is lower today than it was when the governor of Maine was telling that joke.

Why is it that all economies, rich and poor, proceed in fits and starts, stumbling from growth to recession and back to growth again? America's long, robust growth of the 1990s ended with the retrenchment of 2001.

During the boom, the labor market was so tight that fast-food restaurants were paying signing bonuses, college graduates were getting stock options worth millions, and anyone with a pulse was earning double-digit returns in the stock market. Then someone hit the reverse thrusters. The business section was soon full of stories about layoffs, bankruptcies, and plunging stock prices. We liked it better the first way. What happened?

To understand the cycle of recession and recovery—the "business cycle," as economists call it—we need to first learn the tools for measuring a modern economy. If the president really did wake up from a coma after suffering a horseshoe accident, it's a fair bet that he would ask for one number first: gross domestic product, or GDP. GDP represents the value of all the goods and services produced in an economy. Tally up the market price of all the goods we manufacture and all the services we provide, and you will get gross domestic product. When the headlines proclaim that the economy grew 2.3 percent in a particular year, we are talking about GDP growth. It means simply that we as a country produced 2.3 percent more goods and services than we did the year before. Similarly, if we say that public education promotes economic growth, we are saying that it raises the rate of GDP growth. Or if we were asked whether an African country is better off in 2002 than it was in 1990, our answer would begin (though certainly not end) with a description of what happened to GDP over the course of

the decade.

Can we really gauge our collective well-being by the quantity of goods and services that we produce? Yes and no. We'll start with "yes," though we will come to "no" before the chapter is done. GDP is a decent measure of our well-being for the simple reason that what we can consume is constrained by what we can produce—either because we consume those goods directly or because we trade them away for goods produced somewhere else. A country with a GDP per capita of \$1,000 cannot consume \$20,000 per capita. Where exactly are the other \$19,000 worth of goods and services going to come from? What we consume can deviate from what we produce for short stretches, just as family spending can deviate from family income for a while. In the long run, however, what a country produces and what it consumes are going to be nearly identical.

I must make two important qualifications. First, what we care about is *real* GDP, which means that the figure has been adjusted to account for inflation. In contrast, *nominal* figures have not been adjusted for inflation. If nominal GDP climbs 10 percent in 2002 but inflation is also 10 percent, then we haven't actually produced more of anything. We've just sold the same amount of stuff at higher prices, which has not made us any better off. Your salary has most likely gone up 10 percent but so has the price of everything you buy. It's the economic equivalent of swapping a \$10 bill for ten \$1 bills—it looks good in your wallet, but you're not any richer. We will explore inflation in greater depth in the next chapter. For now, suffice it to say that our standard of living depends on the quantity of goods and services we take home with us, not on the price that shows up at the register.

Second, we care about GDP *per capita*, which is a nation's GDP divided by its population. Again, this is necessary to prevent wildly misleading conclusions. India has a GDP of \$427 billion while Israel has a GDP of \$97 billion. Which is the richer country? Israel by far. India has nearly a billion people while Israel has only six million; GDP per capita in Israel is \$16,180 compared to only \$440 in India. Similarly, if a country's economy grows 3 percent in a given year but the population grows 5 percent, then GDP per capita will fall. The country is producing more goods and services, but not enough more to keep up with a population that is growing faster.

If we look at real GDP in America, it tells us several things. First, the American economy is massive by global standards. American GDP is roughly \$10 trillion, or roughly the same as the fifteen countries in the European Union combined. The next-largest single economy is Japan, which has a GDP just over \$4 trillion. On a per capita basis, we are rich, both by global standards and by our own historical standards. In 1998, America's GDP per capita was roughly \$30,000, slightly less than Japan or Switzerland, but still nearly the highest in the world. Our real GDP per capita is also twice what it was in 1970 and three times what it was in 1950.

In other words, the average American is three times as rich as he or she would have been in 1950. How could that be? The answer is back in Chapter 5: We're more productive. The day is not any longer, but what we can get done in twenty-four hours has changed dramatically. The Federal Reserve Bank of Dallas came up with a novel way to express our economic progress in the twentieth century: Compare how long we have to work now in order to buy basic items with how long we had to work to buy the same items in 1900. As the officials at the Dallas Fed explain, "Making money takes time, so when we shop, we're really spending time. The real cost of living isn't measured in dollars and cents but in the hours and minutes we must work to live."!

So here goes: A pair of stockings cost 25 cents a century ago. Of course, the average wage at the time was 14.8 cents an hour, so the real cost of stockings in 1900 was one hour and forty-one minutes of work for the average American. If you walk into a department store today, stockings (pantyhose) are seemingly more expensive than they were in 1900—but they're not. The price has gone up, but our wages have gone up even faster. Stockings now cost around \$4, while America's average wage is over \$13 an hour. As a result, a pair of stockings costs the average worker only eighteen minutes of time, a stunning improvement from an hour and forty-one minutes.

The same is true for most goods. If your grandmother were to complain that a frying chicken costs more

today than it did when she was growing up, she would be correct only in the most technical sense. The price of a three-pound chicken has indeed climbed from \$1.23 in 1919 to \$3.15 in 1997. But grandma really has nothing to complain about. The "work time" necessary to earn a chicken has dropped remarkably. In 1919, the average worker spent two hours and thirty-seven minutes to earn enough money to buy a chicken (and, I'm guessing, at least another forty-five minutes for the mashed potatoes). In short, you would work most of your morning just to earn lunch. How long does it take to "earn" a chicken these days? Fourteen minutes. Cut out one personal phone call and you've got Sunday dinner taken care of. Skip that *Survivor* chat room and you could probably feed the neighbors, too.

Do you remember the days when it was novel, perhaps even mildly impressive, to see someone speaking on a cellular phone in a restaurant? (Okay, it was a short stretch of time, but a cell phone did have a certain cachet in the mid-1980s.) No wonder; back then a cell phone "cost" about 456 hours of work for the average American. Two decades later, cell phones are just plain annoying, in large part because everyone has one. The reason everyone has one is that they now "cost" about nine hours of work for the average worker—98 percent less than they cost 20 years ago.

We take this material progress for granted; we shouldn't. A rapidly rising standard of living has not been the norm throughout history. Robert Lucas, Jr., winner of the Nobel Prize in 1995 for his numerous contributions to macroeconomics, has argued that even in the richest countries, the phenomenon of sustained growth in living standards is only a few centuries old. Other economists have concluded that the growth rate of GDP per capita in Europe between 500 and 1500 was essentially zero.<sup>2</sup> They don't call it the Dark Ages for nothing. We should also make clear what it means for a country to be poor by global standards at the beginning of the twenty-first century. As I've noted, India has a per capita GDP of \$440. But let's translate that into something that is more than just a number. Modern India has 500,000 cases of Hansen's disease, better known to the world as leprosy. Leprosy is a contagious disease that attacks the body's tissues and nerves, leaving horrible scars and limb deformities. The striking thing about Hansen's disease is that it is easily cured, and, if caught early, recovery is complete. How much does it cost to treat leprosy? One \$3 dose of antibiotic will cure a mild case; a \$20 regimen of three antibiotics will cure a more severe case. The World Health Organization even provides the drugs free, but India's health care infrastructure is not good enough to identify the afflicted and get them the medicine they need.<sup>3</sup>

So, half a million people in India are horribly disfigured by a disease that costs \$3 to cure. That is what it means to have a per capita GDP of \$440.

Having said all that, GDP is, like any other statistic, just one measure. Beauty pageants and golf notwithstanding, it is hard to collapse complex entities into a single number. The list of knocks against GDP as a measure of social progress is a long one. GDP does not count any economic activity that is not paid for, such as work done in the home. If you cook dinner, take care of the kids, and tidy up around the house, none of that counts toward the nation's official output. However, if you order out food, drop your kids off at a child care center, and hire a cleaning lady, all of that does. Nor does GDP account for environmental degradation; if a company clear-cuts a virgin forest to make paper, the value of the paper shows up in the GDP figures without any corresponding debit for the forest that is now gone. Indeed, there are no value judgments attached to GDP whatsoever. A dollar spent building a prison or cleaning up after a natural disaster counts, even though we would be better off if we did not need prisons or if there were no disaster to clean up after. GDP per capita takes no account of the distribution of income; it is a simple average that can mask enormous disparities between rich and poor.

The most effective knock against GDP may simply be that it is an imperfect measure of how well off we really consider ourselves to be. Economics has an overly tautological view of happiness: The things we do must make us happy; otherwise we would not do them. Similarly, growing richer must make us better off because we can do and have more of the things that we enjoy. Yet survey results tell us something different. Richer may not

be happier. The period of rising real incomes from 1970 to 1999 coincided with a decrease in those who described themselves as "very happy" from 36 percent to 29 percent.<sup>4</sup> Economists are belatedly beginning to probe this phenomenon, albeit in their own perversely quantitative way. For example, David Blanchflower and Andrew Oswald, economists at Dartmouth and the University of Warwick, respectively, have found that a lasting marriage is worth \$100,000 a year, since married people report being as happy, on average, as divorced (and not remarried) individuals who have incomes that are \$100,000 higher. So, before you go to bed tonight, be sure to sure to tell your spouse that you would not give him or her up for anything less than \$100,000 a year.

If GDP is a flawed measure of economic progress, why can't we come up with something better?

We can, argues Marc Miringhoff, a professor of social sciences at Fordham University, who believes that the nation should have a "social report card" that includes indicators such as the child poverty rate. Mr. Miringhoff told the *New York Times*, "If the country knows that interest rates are up by one-quarter of a percent, people need to know that we have a child poverty indicator that is the worst in the industrial world. When that hits a new low, bells ought to go off the way it does when Alan Greenspan slams the breaks on inflation."<sup>5</sup> He proposes a social health index that would combine sixteen social indicators, such as child poverty, infant mortality, crime, access to health care, and affordable housing. How do the last several decades look through this lens? Mr. Miringhoff's social health index plunged from 77 out of a possible 100 in 1973 to 38 in 1993 before bouncing back to 46 in 1997.

Conservative author and commentator William Bennett agrees with half of that analysis. We do need a measure of progress that is broader than GDP, he argues. But ditch all that liberal claptrap. Mr. Bennett's "index of leading cultural indicators" includes the kinds of things that he considers important: out-of-wedlock births, divorce rates, drug use, participation in church groups, and the level of trust in government. The United Nations has its own measure, too. The human development index combines measures of per capita income, life expectancy, literacy, and educational attainment. By this measure, the United States ranks second in the world, tied with Norway and behind Canada.

So you begin to see the problem. Any measure of economic progress depends on how you define progress. GDP just adds up the numbers. There is something to be said for that. All else equal, it is better for a nation to produce more goods and services than less. When GDP turns negative, the damage is real: jobs lost, businesses closed, productive capacity turned idle. But why should we ever have to deal with that any way? Why should a modern economy switch from forward to reverse? If we can produce and consume \$10 trillion worth of stuff, and put most Americans to work doing it, why should we toss a bunch of people out of work and produce 2 percent less the following year?

The best answer is that recessions are like wars: If we could prevent them, we would. Each one is just different enough from the last to make it hard to ward off. (Though presumably policymakers have prevented both wars and recessions on numerous occasions; it's only when they fail that we notice.) In general, recessions stem from some shock to the economy. That is, something bad happens. It may be the collapse of a stock market or property bubble (the United States in 1929 and Japan in 1989), a steep rise in the price of oil (the United States in 1973) or even a deliberate attempt by the Federal Reserve to slow down an overheated economy (the United States in 1990). In developing countries, the shock may come from a sudden fall in the price of a commodity on which the economy is heavily dependent. For example, Central America is currently reeling from low coffee prices, which have plunged from \$150 per hundred pounds to \$50 per hundred pounds. Obviously there may be a combination of causes. The American slowdown that began in 2001 had its roots in the "tech wreck"-the overinvestment in technology that ultimately ended with the bursting of the Internet bubble. That trouble was compounded by the terrorist attacks of September 11 and their aftermath.

The most fascinating thing about recessions is how they spread. Take the coffee example. The *New York Times* reported in the fall of 2001:

The collapse of the [coffee] market has set off a chain reaction that is felt throughout the region. Towns have been left to scrape by as tax receipts drop, forcing them to scale back services and layoff workers. Farms have scaled back or closed, leaving thousands of the area's most vulnerable people with no money to buy food or clothes or to pay their rent. Small growers, in debt to banks and coffee processors who lent them money to care for the crops and workers, have been idled, and some of them are facing the loss of their land.

Whether you live in Central America or Santa Monica, someone else's economic distress can become your problem very quickly. The terrorist attacks on the World Trade Center and the Pentagon are a sad example. In the aftermath of the terrorist hijackings, Americans sharply curtailed their travel, devastating the airline and travel industry. Almost immediately, the major airlines announced tens of thousands of layoffs. Boeing, anticipating fewer orders for new planes, announced thirty thousand layoffs of its own. But that only hints at the economic toll. Workers who lost jobs, and others who feared their jobs were at risk, began to spend less. Indeed, we all began to feel some trepidation about the future; we pared back our budgets as a result. Falling stock prices feed our spending anxiety. We check the stock tables and realize that we are less wealthy than we thought.

Here is the intriguing paradox: Our natural (and rational) reaction to precarious economic times is to become more cautious with our spending, which makes our collective situation worse. The loss of confidence caused by a shock to the economy may turn out to be worse than the shock itself. My thrift-a decision to curtail my advertising budget or buy a car next year instead of this year-may cost you your job, which will in turn hurt my business! Indeed, if we all believe that the economy is likely to get worse, then it will get worse. And if we all believe it will get better, then it will get better. Our behavior-to spend or not to spend-is conditioned on our expectations, and those expectations can quickly become self-fulfilling. Franklin Delano Roosevelt's admonition that we have "nothing to fear but fear itself" was both excellent leadership and good economics. Similarly, Rudy Giuliani's exhortation that New Yorkers should go out and do their holiday shopping in the weeks after the World Trade Center attack was not as wacky as it sounded. Spending can generate confidence that generates spending that causes a recovery.

This is not to suggest that recessions are entirely a figment of our collective imagination (though that is theoretically possible). There are often underlying issues that need to work themselves out. In the case of the "tech wreck," we massively overinvested in Internet businesses and related technology. As some firms go bust, and as other firms cut back their IT spending, resources are reallocated. Suddenly there are more U Hauls going out of Silicon Valley than in. Or, in the case of higher energy prices, we reorganize our economy to deal with a world in which oil is \$30 a barrel instead of \$10. Recessions may actually be good for long term growth because they purge the economy of less productive ventures, just as a harsh winter may be good for the long-term health of a species (if not necessarily for those animals that freeze to death).

Recessions can spread quickly across international borders. If the U.S. economy weakens, then we buy fewer goods from abroad. Pretty soon Mexico, which sends more than 80 percent of its exports to the United States, is reeling. In business and sports, your competitor's misfortune is your gain. At the global level, the opposite is true. *If other powerful economies fall into recession, they stop buying our goods and service.* Think about it: If unemployment doubles in Japan or Germany, how exactly is that going to make you better off? One of the most serious threats to American economic growth at the moment is the lack of growth everywhere else. Since the world's largest economies, Japan, Europe, and America, are all on the brink of recession at the same time, there is no one left to spend the world back into good economic health.

The business cycle takes a human toll, as the layoffs splashed across the headlines attest. Policymakers are increasingly expected to smooth this business cycle; economists are supposed to tell them how to do it. Government has two tools at its disposal: fiscal policy and monetary policy. The objective of each is the same: to encourage consumers and businesses to begin spending and investing again so that the economy's capacity no longer sits idle.

Fiscal policy uses the government's capacity to tax and spend as a lever for prying the economy from reverse into forward. If nervous consumers won't spend, then the government will do it for them-and that can create a virtuous circle. While consumers are sitting at home with their wallets tucked firmly under the mattress, the government can start to build highways and bridges. Construction workers go back to work; their firms place orders for materials. Cement plants call idled workers back. As the world starts to look like a better place, we feel comfortable making major purchases again. The cycle we described earlier begins to work in reverse. The most famous fiscal stimulus was World War II, which gets much of the credit for spending the United States out of the Great Depression.

Or the government can stimulate the economy by cutting taxes. Consumers, finding more money in their paychecks at the end of the month, decide that they can afford to spend some of it. Again, this spending is supposed to break the back of the recession. Purchases generated by the tax cut put workers back on the job, which inspires more spending and confidence, and so on. The notion that the government can use fiscal policy—spending, tax cuts, or both—to “fine-tune” the economy was the central insight of John Maynard Keynes. There is nothing wrong with the idea. Most economists would concede that, in theory, government has the tools to smooth the business cycle. The problem is that fiscal policy is not made in theory; it's made in Congress. For fiscal policy to be a successful antidote to recession, three things must happen: (1) Congress and the president must agree to a plan that contains an appropriate remedy; (2) they must pass their plan in a timely manner; and (3) the prescribed remedy must kick in fast. The likelihood of nailing all three of these requirements is slim. *Remarkably, in most postwar recessions, Congress did not pass legislation in response to the downturn until after it had ended.* In one particularly egregious example, Congress was still passing legislation in May 1977 to deal with the recession that ended in March 1975.<sup>7</sup> More recently, consider a front-page headline in the *New York Times* on March 8, 2002: “Fed Chief Sees Decline Over; House Passes Recovery Bill.” I'm not making this stuff up.

The second tool at the government's disposal is monetary policy, which has the potential to affect the economy faster than you can read this paragraph. The chairman of the Federal Reserve can raise or lower short-term interest rates with one phone call. No haggling with Congress; no waiting years for tax cuts. As a result, there is now a consensus among economists that normal business cycles are best managed with monetary policy. Thus, the whole next chapter is devoted to the mysterious workings of the Federal Reserve. For now, suffice it to say that cutting interest rates makes it cheaper for consumers to buy houses, cars, and other big-ticket items as well as for firms to invest in new plants and machinery. Cheap money from the Fed pries wallets open again.

An autoworker in Detroit, who has spent his career getting laid off for months at a time and then called back to work, is going to ask a simple question: Are we getting any better at all of this? Yes, we are. The United States has gone through eleven recessions since World War II.<sup>8</sup> The worst was during 1973-75 when GDP dropped 3.4 percent from peak to trough. That is not even the same order of magnitude as the Great Depression. From 1929 to 1933, real GDP fell by 30 percent while unemployment climbed from 3 percent to 25 percent. Prior to the Great Depression, the United States experienced ten depressions—each worse than anything we've had since.<sup>9</sup>

I conceded earlier in this chapter that GDP is not the only measure of economic progress. Our economy consists of hundreds of millions of people living in various states of happiness or unhappiness. Any president recovering from a horseshoe accident would demand a handful of other economic indicators, just as emergency room physicians ask for a patient's vital signs (or at least that is what they do on *ER*). If you were to take the vital

signs of any economy on the planet, here are the economic indicators, along with GDP, that policymakers would ask for first.

*Unemployment.* My mother does not have a job; neither does either of my brothers. Yet only one of these family members is unemployed. The unemployment rate is the fraction of workers who would like to work but cannot find jobs. (My mother has no interest in working and one of my brothers is in graduate school.) America's unemployment rate fell below 4 percent during the peak of the boom in the 1990s; it has since climbed back over 5 percent.

Anyone who cares about unemployment should care about economic growth, too. The general rule of thumb, based on research done by economist Arthur Okun and known thereafter as Okun's law, is that GDP growth of 3 percent a year will leave the unemployment rate unchanged. Faster or slower growth will move the unemployment rate up or down by one half a percentage point for each percentage point change in GDP. Thus, GDP growth of 4 percent would lower unemployment by half a percentage point, and GDP growth of only 2 percent would cause unemployment to rise by half a percentage point. This relationship is not an iron law; rather, it describes the relationship in America between GDP growth and unemployment over the five-decade period studied by Mr. Okun, roughly 1930 to 1980.

*Poverty.* Even in the best of times, a drive through Chicago's housing projects is ample evidence that not everybody has been invited to the party. But how many Americans are poor? Indeed, what exactly constitutes "poor"? In the 1960s, the U.S. government created the poverty line as a (somewhat arbitrary) definition of the amount of income necessary to buy the basic necessities. Having been adjusted for inflation, the poverty level remains as the statistical threshold for who is poor in America and who is not. For example, the current poverty line for a single adult is \$8,350; the poverty line for a family of two adults and two children is \$17,050.

The poverty rate is simply the fraction of Americans whose incomes fall below the poverty line. Roughly 11 percent of Americans are poor, which is no better than we were doing in the 1970s. The poverty rate rose steadily throughout the 1980s and then drifted down in the 1990s. The overall poverty rate disguises some figures that would otherwise leap off the page: Roughly one in five American children is poor as are nearly 40 percent of black children. Our only resounding success is poverty among the elderly, which has fallen from 30 percent in the 1960s to below 10 percent, largely as the result of Social Security.

*Income inequality.* We care about the size of the pie; we also care about how it is sliced. Economists have a tool that collapses income inequality into a single number, the Gini index.\* On this scale, a score of zero represents total equality—a state in which every worker earns exactly the same. At the other end, a score of 100 represents total inequality—a state in which all income is earned by one individual. The countries of the world can be arrayed along this continuum. In 2000, the United States had a Gini index of 41, compared to 33 for France, 25 for Sweden, and 60 for Brazil. By this measure, the United States has grown more unequal over the past several decades. America's Gini coefficient was 36.5 in 1980 and 37.9 in 1950.

\* To derive the Gini index, the personal incomes in a country are arranged in ascending order. A line, the Lorenz curve, plots the cumulative share of personal income against the cumulative share of population. Total equality would be a 45-degree line. The Gini coefficient is the ratio of the area between the diagonal and the Lorenz curve to the total area under the diagonal.

*Size of government.* If we are going to complain about "big government," we ought to at least know how big that government is. One relatively simple measure of the size of government is the ratio of all government spending (local, state, and federal) to GDP. Government spending in America is roughly 30 percent of GDP, which is low by the standards of the developed world. Government spending in Britain is roughly 40 percent of GDP. In Japan, it is over 45 percent; in France and Sweden it is over 50 percent. On the other hand, America is the only developed country in which the government does not pay for the bulk of health care services. Our government is smaller, but we get less, too.

*Budget deficit/surplus.* Anyone who lived through the presidential election of 2000 heard plenty of talk about budget surpluses (after much talk in the 1980s and 1990s about budget deficits). The concept is simple enough; a budget deficit occurs when the government spends more than it collects in revenues and a surplus is the opposite. The more interesting question is whether either one of these things is good or bad. Unlike accountants, economists are not sticklers for balanced budgets. Rather, the prescription is more likely to be that governments should run modest surpluses in good times and modest deficits in tough times; the budget need only balance in the long run.

Here is why: If the economy slips into recession, then tax revenues will fall and spending on programs such as unemployment insurance will rise. This is likely to lead to a deficit; it is also likely to help the economy recover. Raising taxes or cutting spending during a recession will almost certainly make it worse. Herbert Hoover's insistence on balancing the budget in the face of the Great Depression is considered to be one of the great fiscal follies of all time. In good times, the opposite will be true. Tax revenues will rise and some kinds of spending will fall, leading to a surplus, as we saw in the late 1990s. (We also saw how quickly it disappeared when the economy turned south.) Anyway, there is nothing wrong with modest deficits and surpluses as long as they coincide with the business cycle.

Let me offer two caveats, however. First, if a government runs a deficit, then it must make up the difference by borrowing money. In the case of the United States, we issue treasury bonds. If a deficit becomes large enough, investors may begin to balk at the prospect of lending the government more money. For nations that are not particularly creditworthy, such as Russia or Mexico, a large government deficit and a wary lending community can precipitate a financial crisis.

Second, there is a finite amount of capital in the world; the more the government borrows, the less that leaves for the rest of us. Large budget deficits can "crowd out" private investment by raising real interest rates. As America's large budget deficits began to disappear during the 1990s, one profoundly beneficial effect was a fall in long-term interest rates, making it cheaper for all of us to borrow.

*Current account surplus/deficit.* The U.S. current account deficit is somewhere in the range of \$100 billion. Is it time to rush to the supermarket to stock up on canned goods and bottled water? Probably not. The current account balance, which can be in surplus or deficit, reflects the difference between the income that we earn from the rest of the world and the income that it earns from us. The bulk of that income comes from trade in goods and services. Thus, our balance of trade, which again can be in surplus or deficit, is the largest component of the current account. If we are running a trade deficit with the rest of the world, then we will almost always be running a current account deficit, too. (For the purists, the U.S. current account would also include dividends paid to Americans who own foreign stocks, remittances sent home by Americans working overseas, and other sources of income earned abroad.)

When the current account is in deficit, as ours is now, it is usually because a country is not exporting enough to "pay" for all of its imports. In other words, if we export \$50 billion of goods and import \$100 billion, our trading



partners are going to want something in exchange for that other \$50 billion worth of stuff. We can pay them out of our savings, we can borrow from them to finance the gap, or we can sell them some of our assets, such as stocks and bonds. As a nation, we are consuming more than we are producing, and we have to pay for the difference somehow.

Oddly, this can be a good thing, a bad thing-or somewhere in between. For the first century of America's existence, we ran large current account deficits. We borrowed heavily from abroad so that we could import goods and services to build up our industrial capacity. That was a good thing. Indeed, a current account deficit can be a sign of strength as money pours into countries that show a promising potential for future growth. If, on the other hand, a country is simply importing more than it exports without making investments that will raise future output, then there is a problem, just as you might have a problem if you squandered \$100,000 in student loans without getting a degree. You now have to pay back what you borrowed, plus interest, but you have done nothing to raise your future income. The only way to pay back your debt will be to cut back on your future consumption, which is a painful process. Countries that run large current account deficits are not necessarily in financial trouble; on the other hand, countries that have gotten themselves into financial trouble are usually running large current account deficits.

*National savings.* We all tuck money away for our individual needs: college, retirement, etc. Those private savings decisions, along with the government's decision to run a deficit or surplus, have a profound impact on our economy. The simple reason is that savings are necessary to finance investment, and investment is what makes us more productive as a society. If you put 10 percent of your income in the bank, then somewhere else in the country that money will end up building a plant or financing a college education. If Americans do not collectively put savings in the bank, then we must either forgo important investments or borrow from abroad. Again, that assumes that foreign investors are willing to lend at a reasonable rate, which may not be the case for an economy in a precarious state. Over time, countries' investment rates show a striking correlation with their domestic savings rates.

The U.S. savings rate tells a cautionary tale. It has fallen steadily from over 9 percent in the 1960s and 1970s to 6 percent in the 1980s to below 5 percent in the mid-1990s to roughly zero by the end of the 1990s.<sup>10</sup> We can and have borrowed from abroad to finance our investment-at a cost. Nobody lends money free, and borrowing from abroad means that we must pay some of our investment returns to our foreign lenders. Any country with significant exposure to foreign lenders must always worry that when times get tough, the herd of international investors will get spooked and flee with their capital.

*Demographics.* Americans are getting older, literally. As economist Paul Krugman has noted, the age distribution in America will eventually begin to look as it does in Florida. That is good for the companies that manufacture shuffleboard equipment. It is not so good for government finances. The bulk of government benefits, notably Social Security and Medicare, are bestowed on Americans who are retired. These programs are financed with payroll taxes imposed on younger Americans who are still working. If the ratio of young Americans to older Americans begins to change, then the financial health of programs like Social Security and Medicare begins to change, too.

Indeed, we can explain the importance of demographics *and* fix Social Security all in the next two paragraphs. Social Security is a "pay-as-you-go" program. When American workers pay into Social Security (that large FICA deduction on your paycheck), the money does not get invested somewhere so that you can draw on it twenty or thirty years later, as it would in a private pension fund. Rather, that money is used to pay current retirees. Straight from young Peter to old Paul. The program is one big pyramid scheme, and, like any good pyramid scheme, it works fine as long as there are enough workers on the bottom to continue paying the retirees

at the top.

Therein lies the problem. Americans are having fewer children and living longer. That means that there are fewer workers to pay for every retiree—a lot fewer. In 1960, there were five workers for every retiree. Now there are three workers for every retiree. By 2032, there will be only two. Imagine Social Security (or Medicare) as a seesaw in which payments made by workers are on one side and benefits collected by retirees are on the other. The program is solvent as long as the seesaw balances. As the number of workers on one side shrinks while the number of retirees on the other side grows, the seesaw begins to tip. In theory, fixing the problem is easy. We can take more from current workers, either by increasing the payroll tax or by making them more productive and raising their incomes (so that the same tax generates more revenues). Or we can give less to retirees, either by cutting their benefits or by raising the retirement age. That is the very simple economic crux of the problem. Of course, if you think any of these solutions would be politically palatable, please go back and read Chapter 8 again.

I should comment on the Social Security Trust Fund—the money that Al Gore wanted to put in a "lockbox." For all the long-term challenges of Social Security, the system is currently taking in more than it pays out. The reason is that the baby boomers, the demographic equivalent of a pig in a python, are still working. When they begin to retire, the financial picture will change markedly. The surplus funds that we are taking in today are a down payment on what we will owe the baby boomers when they begin to collect benefits. Think of the money as sandbags that we can put on the side of the workers to help balance the seesaw twenty or thirty years from now. If we get rid of the sandbags now, it will be all the harder to balance the seesaw in the future.

Ronald Reagan described economists as individuals who see something work in practice and wonder if it might work in theory. His observation was no doubt inspired by a frustration that so much of what happens in the world economy still seems beyond our control, or even our understanding. At the end of the day, the world is still a fabulously complex and unpredictable place. In the wake of the World Trade Center attack, after Wall Street swooned and Americans began to fear a recession, one Wall Street economist wondered aloud, "Which economic forecast has this in it?"

None. But we do know how to pick up the pieces better than we ever have in the past. Only hours after the attack, when Americans were still not sure where their president was, Alan Greenspan issued a simple but powerful statement that the Federal Reserve was open for business and would do whatever was necessary to prevent a wider economic calamity. A similarly adroit move in 1929 might have spared the United States from the Great Depression.

## NOTES

1. Michael Cox and Richard Alm, *Time Well Spent: The Declining Real Cost of Living in America*, Federal Reserve Bank of Dallas, 1997 Annual Report.
2. Oded Galor and David N. Weil, "Population, Technology, and Growth: From Malthusian Stagnation to the Demographic Transition and Beyond." — *American Economic Review*, vol. 20, no. 4 (September 2000).
3. Miriam Jordan, "Brazil's Age-Old Endemic," *Wall Street Journal*, August 20, 2001.
4. David Leonhardt, "If Richer Isn't Happier, What Is?" *New York Times*, May 19, 2001.
5. Alexander Stille, "A Happiness Index with a Long Reach: Beyond GNP to Subtler Measures," *New York Times*, May 20, 2000, p. A17.
6. David Gonzalez, "A Coffee Crisis' Devastating Domino Effect in Nicaragua." *New York Times*, August 29, 2001.
7. Bruce Bartlett, "What Tax Cuts Can't Do," *New York Times*, December 20, 2000.
8. "What a Peculiar Cycle," *The Economist*, March 10, 2001.
9. James W Paulsen, *Economic and Market Perspective*, Wells Capital Management, October 1999.
10. Jagadeesh Gokhale, "Are We Saving Enough?" *Economic Commentary*, Federal Reserve Bank of Cleveland, July 2000.
11. Danny Hakim, "Investors Seek a Refuge, and Experts Do, Too," *New York Times*, September 23, 2001.