The Cost Disease
Why Computers Get Cheaper and Health Care Doesn’t
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quantities and ever rising quality in the future, despite their rising costs. Thus, there is no need to contemplate reductions in the provision of health care, education, or the performing arts. Here, too, the future is already with us.

This is evident in Tables 3.1 and 3.2, which show that despite steadily rising health-care and education costs,\textsuperscript{10} health-care quality and access have improved steadily and substantially in much of the world in recent decades, while secondary and postsecondary education has become more common.

Although the cost disease has constricted some personal services, such as household servant labor and secretarial assistance, this con­striction need not apply to health care and education, where demand not only persists in the face of cost increases but even expands when rising productivity enhances consumers’ purchasing power.\textsuperscript{11} Despite the appearance of dramatic cost increases and ensuing reductions in quantity and quality induced by ill-considered reactions to those increases, the future promises more and better health care, education, and police protection—to name just three of the most critical stagnant-sector services. In short, society can afford to expand its consumption of these services, despite their rising costs. That, then, is not the real and ultimately unavoidable danger associated with the cost disease.

\textbf{FOUR}

\textit{Yes, We Can Afford It}

If the amount that can be produced by an hour of labor increases for almost every commodity and decreases for none, then more of everything can be provided for the public to consume.

\textit{—William Baumol}

We saw in Chapter 3 that the cost disease has brought profound changes in the way we live. If it continues to influence the workings of the economy, the consequences may be even more far-reaching. With continued growth in general productivity, the typical household may enjoy an abundance of goods, but if governmental responses are poorly considered, citizens also may suffer from great deterioration in public services such as garbage removal. The services of doctors, teachers, and police officers may become more automated and impersonal, and the arts and crafts may be increasingly supplied only by amateurs—the cost of professional work in these fields may be too high. In these circumstances, people may begin to question
whether the explosion of the supply of material goods has really improved their quality of life.

Yet the cost disease does not make this future inevitable. To see why, one must understand that the source of the problem, paradoxically, is the growth of our economy's labor productivity—or rather the unevenness of that growth. Trash removal costs go up not because garbage collectors become less efficient but because less labor is needed to manufacture a single computer, for instance, and wages in that industry (and others, as well) continue to climb. Although the sanitation worker's productivity is barely increasing, her wages must go up in order to keep her at her garbage removal job—otherwise, she might be tempted to join the computer assembly line. Productivity growth in some sectors of the economy—and the wage increases that accompany it—thus raises the cost of garbage removal and other personal services.

Despite this trend, increasing productivity does not make an economy unable to afford what it could afford in the past. Productivity growth makes a society wealthier, not poorer, and able to afford more of all things—televisions, electric toothbrushes, and cell phones, as well as medical care, education, and other services. This outcome is particularly likely, given the impressive speed at which overall productivity is increasing, relative to the costs of personal services.

But productivity growth alone does not solve all of our economic problems. Workers with no great skills cannot expect wage increases commensurate with overall productivity growth or the rising costs of health care and education; neither can the unemployed. The state must help equalize matters by providing such services to those who otherwise could not afford them. The tax increases required to fund the provision of such services by the government, however, come with political and economic consequences.

Unprecedented Productivity Increases: Past, Present, and Future

The statement that the global economy's productivity is growing is misleading—not because it is wrong, but because it fails to make clear the economy's fantastic growth, which is so remarkable and unprecedented that it strains our comprehension. Figure 4.1, already familiar from Chapter 2, showed the record of productivity growth, measured as gross domestic product (GDP) per capita between AD 1500 and 2000 for China, Italy, and the United Kingdom. I omitted the United States for the obvious reason that its records do not go back to 1500, and I included Italy because its prosperity

![Graph showing GDP per capita over time for China, the United Kingdom, and Italy.](image)

**Figure 4.1.** Gross domestic product per capita, 1500–2006: China, Italy, and the United Kingdom. (Based on data from Angus Maddison, *The World Economy: A Millennial Perspective*, Paris: OECD, 2001, p. 264.)
during the Renaissance constitutes a suggestive comparison. China is included because its data show the twentieth-century sequel—unparalleled anywhere apart from England's nineteenth-century Industrial Revolution—to its sixteen centuries of invention that were accompanied by relatively modest overall growth.

According to the best available estimates, between the fall of the Roman Empire in a.d. 476 and the American Revolution thirteen centuries later, the worldwide average growth in output per worker was not materially different from zero. It probably declined until about the tenth century and then began to crawl upward at a barely discernible pace. Although Figure 4.1 does not include data from before 1500, it does depict the crucial era when the Renaissance, already well established in Italy, got under way in England under Henry VIII. Between 1500 and the middle of the eighteenth century, per capita GDP in the three countries was virtually flat—a striking record of snail's-pace progress. We see also how very slightly the economic welfare of the Italians exceeded that of the English in that era, despite Italy's achievements in banking, cloth manufacturing, merchandising, and other fields. But from then on, it is clear that the rate of improvement grows ever faster, until the curves jut sharply upward, and China pulls ahead of both England and Italy in the second half of the twentieth century, as Figure 4.2 shows.

What is striking here is China's poor economic performance before the late twentieth century, at which point it began its dramatic productivity growth. This recent explosion in output contrasts dramatically with China's earlier centuries of astonishing invention, which failed to produce anything like the past three centuries' growth in the West. One can argue that despite medieval China's profusion of inventors, entrepreneurs sought roles in the bureaucracy rather than in industry. In recent decades, entrepreneurship in China has instead directed itself to the business sector, while invention has fallen well short of its incredible earlier performance.

As for twentieth-century America, the most conservative estimates indicate that the average American's purchasing power in 2010 is about seven times as great as her ancestor's a century earlier. This means that an average American family living around 1900 could afford only one-seventh the food, clothing, housing, and other amenities that the average family today enjoys. This change, too, is incredible in light of the world's previous economic performance. Its magnitude can perhaps be best understood by imagining how your family's life would change if it lost more than $6 out of every $7 it now earns, spends, and saves.
The Survivable Cost Disease

But What Happened to Costs?

We can look at this enormous economic progress from another angle: by examining how much work time it takes to acquire the income needed to buy the things we purchase. This arguably constitutes the best measure of their true cost to us. According to a 1997 report by the Federal Reserve Bank of Dallas, in 1919 the average worker labored thirteen minutes to earn enough to buy a pound of bread compared with just four minutes in 1997. The work time required to buy one dozen eggs in 1919—eighty minutes—had fallen to just five minutes by 1997. Figure 4.3 shows how the work time required to buy a variety of snack foods also has declined over the past century.

Food is not the only item that has become much less costly by this measure. In 1910, 345 hours of work time bought a kitchen range, and 553 hours bought a clothes washer. By 1997, those numbers had dropped to 22 and 26 hours, respectively. Purchasing a 1908 Ford Model T automobile required 4,696 hours of labor versus 1,365 hours for a 1997 Ford Taurus. Figure 4.4 shows the dramatic reduction in the labor time, over a shorter time period, required to buy various electronic devices.

The most sensational decrease of all has been in the cost of computers. Computer capability is standardized in terms of the number of MIPS (millions of instructions per second) a computer can handle. In 1997, one MIPS of computer capacity cost about twenty-seven minutes of labor at the average wage. In 1984, it cost fifty-two hours of labor; in 1970, the cost was 1.24 lifetimes of labor; and in 1944, the cost was a barely believable 733,000 lifetimes of labor. The data cited here are more than a decade old, and I have not been able to find any studies of the subject that are more recent. Still, there is

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Figure 4.3. Declining real labor price of junk foods in the twentieth century. (From Baumol/Blinder, Economics, 12E, © 2011 South-Western, a part of Cengage Learning, Inc. Reproduced by permission. www.cengage.com/permissions.)

Figure 4.4. Declining real labor price of electronic products in the twentieth century. (From Baumol/Blinder, Economics, 12E, © 2011 South-Western, a part of Cengage Learning, Inc. Reproduced by permission. www.cengage.com/permissions.)
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every reason to believe that the price of computing power, by any measure, has continued to plummet. In 1997, you could buy a computer with the capacity to perform 33 million computations per second for $1,000. In 2006, $1,000 bought you a computer capable of 2 trillion computations per second—even though $1,000 in 2006 could only buy what about $800 in 1997 could have purchased.10

The rise in productivity that makes it possible to create commodities with less and less labor, thereby lowering what consumers pay, has occurred in almost every industry. Even services that seem most impervious to productivity growth have participated indirectly in this process. I frequently use the example of a Mozart string quartet written for a half-hour performance as an example of a service that resists reduction of its labor content. But even an activity like live musical performance has benefited from considerable savings in time expended. In 1790, when Mozart traveled from Vienna to give a performance in Frankfort am Main, the trip required six days of extreme discomfort. (At the time, however, that was considered swift—Mozart wrote that he was surprised at the speed of the journey.11) Today, the same trip takes only about six hours: 1.5 hours for the airplane flight and 4.5 hours for transit to and from the airport and other preliminaries. Surely this is a marked reduction in the time required for such a musical performance.

We Can Afford It All

With this explosion of purchasing power at our disposal, we can expect to afford even the sharply rising costs of services such as health care and education without cutbacks in quality or quantity.12 The extrapolations in Figures 4-5, 4-6, and 4-7 show what will happen to our spending on health care and other products and services if current productivity growth continues.13 In that future world, we can have much more of all of these goods. By 2105, the amounts we can consume will have gone up about 700 percent, leaving us far better off.

The only thing that will change, in terms of the cost to us, is how we will have to divide our money among these items. Because manufacturing and agricultural products are growing steadily cheaper in real dollars while health care and education are growing more expensive, we will have to increase the share of money we devote to the latter services. The proportions will change drastically. In Figure 4-5, which projects relative spending on goods and services from 2005 to 2105, I have kept the height of the bars (total

Figure 4-5. Health-care and other spending as a percentage of U.S. gross domestic product: 2005 and extrapolated 2105. (Based on data from OECD in Figures 2007, Health Spending and Resources, Paris: OECD, pp. 8–9.)
spending) the same for ease of comparison. But the share of the spending devoted to health care will have exploded from about 15 percent of GDP in 2005 to roughly 60 percent in 2105.  

Yet because output is growing so fast, the total amount of purchasing power left over for other products and services will increase dramatically. Figure 4.6 shows the eightfold increase in total output per person by 2105 if overall economic productivity grows as it did during the twentieth century.

Health-care spending also will increase enormously in the next century, as Figure 4.7 shows. But despite this great increase, the amount left over for all other purchases also will grow greatly—by more than three-and-a-half times—thanks to the eightfold rise in total income in the United States. We will be so much richer overall that, despite dramatically increasing health-care costs, we will be able to afford much more of everything. The cost disease, which was a cause for great gloom in Chapter 1, turns out to affect only the way in which we divide up the money we spend. It does not force us to decrease how much we buy. Thus, with no increase in the work we expend, our standard of living will have improved dramatically.
Why We Can Afford It All: No Historical Accident

I have used statistics to argue that, in the present state of the economy, the rising cost of services such as health care and education will not make them unaffordable to most consumers, though the poor will continue to be denied their benefits without some form of assistance. But is this affordability a mere accident of recent history? Could productivity and costs at some period in the future—perhaps very soon—behave very differently and force consumers to give up these beneficial services? The answer is no.

The reason is straightforward. In the world’s community of consumers, if someone spends a dollar, someone else must earn that dollar. Thus, if people in that community choose to purchase all the commodities produced in all sectors, even if they must beg or borrow to obtain the necessary funds, then the members of that community as a whole automatically will earn the amount that is required to make those purchases. (Of course, the poor, unfortunately, are likely to get a much lesser share of the economy’s output, but the shortfall in their purchasing power must be offset by the overabundant earnings of the wealthy.)

Although this may seem like the illusion of a professional magician, it is simply an inescapable feature of the sales process, and it remains true no matter how quickly (or slowly) the cost of any product rises. Thus, the statistical evidence provided in this chapter cannot be attributed to some set of freak circumstances. The rising costs of stagnant-sector products will never leave consumers, as a group, unable to afford to buy them.

The implication is clear. We can surely afford it—cars and computers as well as health care and education. The quantity and quality of the cost disease–affected services we obtain in the future will depend on how we order our priorities. If we value them sufficiently, we can have more and better services—at some sacrifice in the rate at which our consumption of manufactures grows. Society does have a choice, but if we fail to take steps to exercise this, our economy could continue to drift toward a world in which material goods are abundant, but many things we consider primary requisites for a high quality of life are too scarce, particularly for the poor.

Will Productivity Continue to Accelerate?

There is more to this story than mere accounting. The more relevant issue is whether productivity in the industrialized and rapidly developing countries of the world will continue to increase as it has in recent centuries. The evolution of free markets has created an environment that drives private firms constantly to invest funds and energy in the innovations that spur productivity growth. Elsewhere I have called this arrangement “the free-market innovation machine.” Key to this story are the giant oligopoly firms that have accounted for about 70 percent of the vast private spending on research and development (R&D) in the United States since the nineteenth century. The R&D activities of oligopoly firms in the high-tech industries can be described as an “arms race.” In keeping with the theories of that noted economist Joseph Schumpeter, who contributed much work on the topic of innovative entrepreneurship, these firms now regard pricing and advertising as secondary weapons in their competitive battles. The primary weapon has become the new or improved products that these firms race to introduce before their rivals can bring more attractive alternatives to market. No firm dares to fall behind in the race to create new and better products because protracted failure to do so can be fatal. Just as the Red Queen’s subjects in Lewis Carroll’s Through the Looking Glass had to run as fast as they could in order to stay in the same place, so too must each firm constantly come up with new products in order to preserve its position in the market. This “Red Queen game” is a key
attribute of advanced economics that helps to account for their continuing outpouring of innovations. Corporate survival is a far more powerful incentive than monetary reward, which allows successful firms to rest on their laurels and withdraw from further innovative activity. Thus, an innovation arms race permits no rest.

The Red Queen game is automatically introduced by oligopolistic competition—that is, competition among a small number of large firms that dominate many industries—and is part of the normal workings of the market. Large, competitive high-tech firms cannot avoid—indeed, cannot survive without—constant and substantial reinvestment in R&D, whether conducted in-house or outsourced. The Red Queen game ensures that these high-tech firms are forced to keep investing in the innovation that drives productivity growth. Thus, there seems to be little reason to worry that productivity growth will slow down in the near future. Because greater productivity obviously means more abundance and more purchasing power, the Red Queen game provides another reason for our optimistic expectation that consumers in industrialized countries will continue to be able to afford ample products and services, even with rapidly rising costs.

The Other Source of Growth

Giant firms that invest heavily in R&D do not carry the burden of improving productivity all by themselves. Much of the innovative activity of the economy comes from another group, the individual inventors and entrepreneurs who have created many of the breakthrough inventions of recent centuries. Indeed, much of the large-firm R&D activity described in the previous section has been devoted to improvement of the breakthroughs contributed by these independent inventors and entrepreneurs, who often sell or lease their creations to larger enterprises.

This raises yet another important question: can we be optimistic about the continuing supply of inventors and entrepreneurs? Some earlier societies created an abundance of invention. The ancient Romans, for instance, probably invented the water mill that was the main source of inanimate power before the age of steam. In the first century A.D., they also invented a working steam engine. During the Middle Ages, the Chinese not only invented gunpowder and the compass, which are commonly attributed to them, but also paper, printing, the spinning wheel, playing cards, elaborate clocks, and much more. Yet these inventions were rarely put to widespread productive use, arguably because the Roman and Chinese entrepreneurs who would have brought the inventions to market were engaged in other tasks. In ancient Rome, those with entrepreneurial ambitions focused instead on supporting and carrying out military activity, while in medieval China, enterprising individuals seem to have focused their energies mainly on passing the imperial examinations and obtaining governmental or judicial positions that allowed them to accumulate wealth through bribery.

There is, then, ample reason to conclude that entrepreneurship plays a crucial role in innovation. Consequently, it is also important to examine what determines the long-run supply of productive entrepreneurial activity, as opposed to entrepreneurship that is unproductive or even destructive as in ancient Rome and medieval China. After all, private mercenary armies and drug cartels need entrepreneurs to get them started, and their activities can surely be rewarding, though they are more likely to damage the economy’s output than to enhance it.

In the economics literature, it is often asserted that an abundant supply of entrepreneurs stimulates growth, while shrinkage in the cadre of entrepreneurs is a significant impediment to growth. But the appearance and disappearance of entrepreneurs is left as a mystery, perhaps related to cultural developments and vaguely described
changes in other psychological and sociological influences. But the historical evidence suggests a less magical explanation. Entrepreneurs do not suddenly appear from nowhere or vanish just as mysteriously. Rather, potential entrepreneurs—talented and ambitious people looking to establish a business enterprise that promises profits, whether legitimate or illegitimate—are always with us, but as the structure of the rewards offered in the economy changes, they switch their activities, gravitating toward arenas where the payoff prospects are most attractive. In doing so, they may move between activities that are generally recognized as entrepreneurial and productive and those that require considerable enterprising talent but may not involve production of goods and services—or may even impede production. Just as technological change led workers and engineers to reallocate themselves from canal building to railroad construction and then to still more modern enterprises, entrepreneurs have reallocated themselves in accordance with changes in the payoffs for different occupations. As they do so, the set of productive entrepreneurs appears to expand or contract.

Thus, innovative entrepreneurship is a resource that can be reallocated between productive and unproductive activities, influenced by the institutional incentives that determine the relative payoffs of the two types of activities. In free-market economies, these incentives include rules that protect private property from expropriation, rules for the enforcement of contracts, a system of patents, and rules of bankruptcy protection that encourage risk taking. With these institutions in place, independent inventors and innovative entrepreneurs can expect earnings and prestige if they are successful. It follows that we may be optimistic about a continued supply of independent inventors and productive entrepreneurs.

A Sanguine Conclusion with Caveats

If we can expect productive innovation to continue, the most pressing problem created by the cost disease is the rise in relative costs of personal services and the resulting illusion that these services are no longer affordable. In reality, we will enjoy more from both the progressive and stagnant sectors, even though the products of the latter sector will grow relatively more expensive over time. But even this desirable outcome brings complications and perils.

Caveat 1: The Cost Disease Disproportionately Affects the Poor

Even if the average American can afford to purchase ever increasing quantities of those goods and services whose real costs are raised by the cost disease, there remain many inhabitants of the United States, and still more elsewhere in the world, whose incomes are far below the average. Here, too, the constantly rising productivity that underlies the cost disease should enable society to mitigate poverty to a substantial degree by providing larger quantities of all goods and services. But will this occur? In the United States, progress has been far from universal. As shown in Figure 4.8, for instance, as of 2007 a dramatically significant number of Americans are uninsured and thus are apt to have difficulty paying for health care. Obviously this problem is far worse during periods of recession, when many more people than usual are without jobs and thus without health insurance. It has been reported that "at least half of all bankruptcies by American families in 2005 were eventuated by medical events and catastrophic health expenditures." As we will see in Chapter 7, enormous medical bills also place a disproportionate burden on the poorer citizens of low- and middle-income countries. Despite measures such as Medicaid and scholarship grants, the rising cost of health care and education serves as an effective access
appropriately cost signals, reporting correctly that the amount of labor required to supply the affected services is declining at a rate far below the average, and perhaps may not be declining at all. As a result, the costs of these services rise persistently in comparison with those of manufactured products, which induces consumers to switch their purchases to those commodities that are easier and less costly to produce. Stagnant services, like the runner who never stops but runs far more slowly than the others, will never win the productivity race. Still, as we have seen in this chapter, rising purchasing power promises to keep even the rising-cost services affordable to the public as a whole. But the public and the government may misunderstand this. After all, the numbers are startling. If current trends continue for the next century, outlays on health care and education alone will far exceed half of the nation’s GDP. This gives the appearance of a problem crying out for a dramatic solution.

Such frightening projections, along with their budgetary manifestations, may lead governments to make decisions that do not promote the public interest. For example, because health-care costs are increasing faster than the rate of inflation, if we want to maintain standards of care in public hospitals it is obviously not enough to keep health-care budgets growing at the economy’s prevailing inflation rate. Those budgets must grow faster, or there must either be an increase in private financing of those services or a decline in quality. Suppose the current inflation rate is 4 percent, but hospital costs are rising at 6 percent a year. A political body that increases its hospitals’ budgets by 5 percent per year will feel that something is wrong—even though the budgets steadily outpace the inflation rate, standards of quality at the hospitals are constantly slipping. If legislators do not realize that the cost disease is causing this problem, they will look for other explanations, such as corrupt or inefficient hospital administrators. The result can be a set of wasteful
rules that inappropriately hamper hospitals' and doctors' freedom of action or tighten hospital budgets below the levels that would be determined by market forces.

Legislators often propose cost controls for sectors of the economy affected by the cost disease—for instance, medical services and insurance services. But cost controls often create problems that are more serious than the disease itself. As we saw in Chapter 1, many economies that have tried the cost-control approach to health-care services—Canada, the United Kingdom, Germany, and others—have had no more success than the United States in controlling cost increases.

We can see manifestations of the problems resulting from cost controls in countries where the systems of medical care and the measures to restrain its costs are touted as models. Surgery that is not an emergency may be subject to long delays or sometimes prohibited altogether. Some Canadians reportedly cross the border to the United States to avoid delays in medical treatments in their own country. In the United Kingdom, as of 2003, at least 10 percent of all people had purchased costly private medical insurance in order to bypass the long wait lists that prevail under the health-care system operated by their government.

The critical point here is that because politicians do not understand the mechanism and nature of the cost disease, and because they face political pressures from a similarly uninformed electorate, they do not realize that we can indeed afford these services without forcing society to undergo unnecessary cuts, restrictions, and other forms of deprivation.

Similarly, the public may perceive that it cannot afford the continually increasing cost of health care. People may be unwilling to revise household budgets to cover rising health-care costs, even as rising per capita incomes make this financially feasible. One cannot argue with such preferences; people are entitled to spend their earnings as they choose. But if retrenchment in the quality or quantity of health care stems from misunderstanding of what the public can really afford, then surely it is important to try to educate the public about this misapprehension. This brings us to our next caveat.

Caveat 3: Educating the Public Will Not Be Easy

Not the least of the problems we face is the difficult task of helping the public recognize the difference between the reality and the illusion of the cost disease. For instance, it surely will be difficult to convince intelligent nonspecialists that although costs of personal services appear to be out of control, they are actually falling in terms of the labor-time required to earn enough to pay for them. Such assertions can sound to the uninformed like a statistical sleight of hand or theoretical gibberish. This is all the more true if the quality of the product simultaneously increases—for instance, by providing better health and enhanced life spans through more effective medical services. That evidently means that we are getting more—possibly far more—for the money spent on this service.

The task of explaining this to the public should not be beyond the abilities of skilled journalists and others who specialize in effective communication. This is an indispensable task—for without it, governments’ efforts to reorient their budgets to respond effectively to the cost disease will fail politically in any democratic society.

Caveat 4: The Public Sector Share of GDP Will Increase Dramatically

The extrapolations presented in this chapter suggest that if health care, education, and other services with similar cost characteristics are supplied largely by government, then by 2015 well over 60 percent of the U.S. GDP may flow through the public sector, thereby
insulating it from control by the market.\textsuperscript{27} The experiences of planned economies indicate that this is not a promising arrangement. Taking so much of the economy out of the control of private enterprise will substantially impede efficiency and handicap economic growth.\textsuperscript{28}

Our municipal governments also face a particularly difficult task in raising the revenues necessary to prevent municipal services from collapsing even more completely than they already have. A large portion of a city government’s budget consists of health care, education, police protection, libraries, and other services subject to cost disease-induced cost increases. Expenditures on these services will have to rise enormously over the next century if the quantity and quality of these services are not to fall behind the outputs of agriculture and manufacturing. Even if the difficult political task of acquiring such increases in government revenues is accomplished, that such an enormous increase in the share of GDP will have to flow through government, rather than private channels, is hardly an attractive prospect.

\textit{Caveat 5: Privatization Is Susceptible to Ill-Advised Cost Controls}

Projects that call for the huge expansion of the public sector are often met with calls for greater reliance on privatization. But privatization is no cure for the cost disease. There are good grounds for public opposition to complete privatization of the public school system, police protection, and national defense. The threat to liberty posed by reliance on private armies, for instance, has been demonstrated by many historical examples.

Moreover, any private industry beset by the cost disease will surely be suspected of greed and malfeasance. Calls for cost controls in such privatized industries will be politically irresistible. But if rising costs are caused by unavoidably slow productivity growth in personal and handicraft services, cost controls can only lead to deterioration in the quality of those services or, worse, to their partial or total disappearance.

It is important to emphasize once again that, in addition to health care and education, the cost disease affects many other services that are vital for a good quality of life, such as the live performing arts, libraries, police protection, restaurants (from which the most labor-intensive dishes have all but disappeared), and welfare support for the poor. If we do not address these cost increases with carefully considered adaptations, our society increasingly will be characterized, in the words of John Kenneth Galbraith, by “private affluence and public squalor.”

\textit{Caveat 6: The Rising-Cost Story Is Basically Reassuring, Unless . . .}

Despite these reservations, the picture of the future that emerges is mostly reassuring. Universally and persistently rising productivity promises a life of abundance and prosperity that we cannot imagine. If we stop and think of the variety of gadgets that are commonplace in every middle-class home—and how inconceivable they were to our ancestors three or four generations back—we will have a vague inkling of what the future promises. As I noted earlier, if productivity over the next century grows at an average annual rate of just over 2 percent, the purchasing power in the hands of an average American will rise eightfold. One way to understand what this means is to imagine yourself eight times richer than you are now—except that you would also have an array of new ways to spend this wealth that are as inconceivable to us as an iPhone was to Calvin Coolidge.

One would think that with such abundance we could deal effectively with problems like world poverty, but this is by no means
guaranteed. In particular, this ignores the terrifying noneconomic threats that hang over us—most prominently climate change and weapons of mass destruction, as well as less lethal forms of mismanagement, from misbehavior of private business to misguided governmental intervention. We will see later in this book that all of these problems are apt to be exacerbated by the cost disease.

Some Final Reservations

Before I turn to the really threatening consequences of the cost disease, I must bring out a more immediate reservation about the optimistic story presented in this chapter. I have argued that continued universal productivity increases will enable society to afford the increasing costs of personal services—such as health care, education, police protection, and live theatrical, musical, and dance performance—whose relative costs are driven up by the irreducible labor content of these activities, making it difficult to introduce productivity-enhancing changes.

The disturbing increases in the relative costs of these services are not likely to end soon. Whatever remedial cost-cutting steps may be attempted, their effect will be negligible and disappointing. This is surely confirmed by the many policies adopted throughout the prosperous countries of the world to reduce health-care expenditures. Moreover, as we will see in Chapter 7, rising health-care costs are now increasingly afflicting fast-developing middle-income countries as well. Some countries have imposed ceilings on doctors' earnings; others have restricted the treatments available to patients. Yet these countries almost always have failed to prevent health-care costs from rising faster than the rate of inflation.

The reason for this general failure lies in the nature of health care and other personal services. Such industries simply do not lend themselves to automation or similar labor-saving strategies. Whatever the virtues of various efforts to curtail health-care costs—such as the landmark health-care legislation adopted in early 2010 in the United States, which is intended to extend insurance protection to millions who are now uninsured—any hope that these measures will bring the rising costs to an end will lead to disappointment.

Still, the costs of health care and other personal services will remain within our reach. The innovation that drives our economy is likely to continue, and productivity in the economy as a whole will continue to rise, giving us the means for everyone to afford to pay for health care, education, and other vital services. These words, written during a severe recession, are apt to strike some readers as naïve. Yet, in the long run, the forces of competition will relentlessly drive innovation forward. We can expect productivity to continue to grow at rates unequalled in earlier history.

The role personal services play in the future depends on how we order our priorities. If we value services sufficiently, we can have more and better services at surprisingly small (if any) sacrifice in what we spend on manufactured goods. Whether this is a good choice is not for economists to say. We, as a society, must decide. If we fail to do so, we may find ourselves in a world where material goods are abundant but the services that sustain our high quality of life continue to deteriorate.

Contrary to appearances, we can afford more ample health care, more abundant education, more adequate support of the indigent, and a growing abundance of private comforts and luxuries. That we cannot afford all of these is an illusion—one that must be dispelled if we are to deal effectively with the fiscal problem that triggers the cost increases, which, in turn, leads to the service cuts that ultimately cause growing public squalor. This conclusion may sound simplistic, but if future productivity bears any resemblance to that of past decades, which brought the United States and the rest of the industrial world better health care and more education despite rising
costs, we must recognize that the increasing costs of services, coupled with rising productivity, are clearly less fear-worthy than they appear to be. As one Washington Post editorial aptly noted, “People sometimes say that the country has no money to deal with the growing tragedy of the inner cities. That’s incorrect. The country has a lot of money. It’s only a question of how we choose to spend it.”

Thus, the late Senator Daniel Patrick Moynihan was precisely right when he characterized these prospects not as a deplorable outlook but rather as constituting a fundamentally optimistic forecast.

While I have argued that the rising-cost side of the cost disease is not as worrisome as it may appear, I have also hinted repeatedly that other consequences of the disease are more threatening. These dangers stem, paradoxically, from some of the products whose costs are driven downward by the cost disease. In this chapter I will focus on two prime examples of this: military armaments and threats to the environment.