11.0 Introduction

The typical American family owns “twice as many cars, drives two-and-a-half times as far, uses 21 times as much plastic, and travels 25 times as far by air as did their parents in 1950” (Durning 1991, 156–158).

Progress, or overconsumption?

Within the benefit–cost efficiency framework, there is simply no room for the concept of “overconsumption.” The whole point of doing a benefit–cost study, after all, is to insure that we do not sacrifice too much consumption in pursuit of environmental quality. From an efficiency perspective, our generation’s increase in consumption over what our parents enjoyed clearly reflects progress.

How then can overconsumption be viewed as an environmental problem? First, consumption (or affluence) crops up in the IPAT equation from Chapter 7:

\[
\text{environmental Impact} = \text{Population} \times \text{Affluence} \times \text{Technology}
\]

IPAT suggests that one of the three main causes of environmental decline is the growth in the consumption of material goods. Why? From an ecological perspective, pessimism is in order about the possibility for technological progress to keep up with the pace of consumption (and population) growth. Thus, for ecologists, the fact that consumption levels are high and growing gets translated into overconsumption as a serious environmental problem. Efficiency advocates, by contrast, are technological optimists and so do not view consumption itself as a serious issue.

If, as ecologists believe, technological progress cannot offset the environmental impact of a quadrupling of consumption over the next fifty years, then this is one sense in which overconsumption is indeed a major environmental issue. But this chapter focuses
on a second argument against high consumption. It does so by questioning a key assumption of the efficiency standard and benefit–cost analysis: “More is better.”

Recall that our target of an efficient outcome was defined as one in which it is impossible to make one person better off without making someone else worse off. In practice, “better off” means “having more goods.” We should remember that goods can include environmental amenities, such as hikes in the mountains, nice views, or clean air, but these are considered by benefit–cost economists to simply be goods that are literally exchangeable for hair conditioners, air conditioners, or video games. They are exchangeable because having more of one of these goods means having less of another. This in turn means they can ultimately be valued in monetary terms, if only indirectly, along the lines spelled out in Chapter 8.

But what if more isn’t really better? If material gain in fact does not lead to greater happiness, then efficient outcomes do not really increase welfare. If more isn’t better, then the trade-off identified by benefit–cost analysis—more environmental protection means less of all other stuff—loses much of its force, and safety or ecological sustainability goals make more sense. Finally, if more isn’t better, then it is certainly fair to say that society is “overconsuming” resources.

11.1 Money and Happiness

One crude but accurate way to state the more is better assumption underlying benefit–cost analysis is that “Money buys happiness.” Does it? According to Jesus, Buddha, Poor Richard, and a recent fortune cookie, the answer is no. However, let’s take a look at the more scientific findings of survey researchers on this issue.

For more than two decades, researchers have been asking groups of people about the relationship between income and happiness in their lives. The results of many studies in America and western Europe reveal a strikingly similar conclusion: Money buys very little happiness, and it does so at a decreasing rate. Table 11.1 shows the results from a ten-nation European survey, including more than 15,000 people. These figures are typical of those found in most other studies and illustrate what has been called the Easterlin paradox.¹

Rising income is clearly correlated with increased life satisfaction only up to around the median income, and the poorest people in a nation are only a bit less happy than the richest. About one in five poor people consider themselves very happy; this figure rises only to about one in four for the wealthiest 25% of the population. Living amongst riches rather than rags is by no means a guaranteed road to happiness.

Moreover, among western countries, people in wealthier nations often report being less happy than those in poorer ones. Ireland, for example, with one third of the per capita income of the United States, ranks consistently higher on the life satisfaction scale.² And the percentage of the U.S. population reporting themselves to be

¹After his seminal article (1974).
²There are substantial intercountry differences. The French, for example, claim to be much less happy than the Belgians. Researchers conclude that this in part reflects social norms about reporting life satisfaction.
TABLE 11.1 Income and Reported Happiness

<table>
<thead>
<tr>
<th>Income Quartile</th>
<th>Percent “Satisfied” or “Very Satisfied” with Life as a Whole</th>
<th>Percent “Very Happy”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest quartile</td>
<td>70%</td>
<td>19%</td>
</tr>
<tr>
<td>Second quartile</td>
<td>78</td>
<td>22</td>
</tr>
<tr>
<td>Third quartile</td>
<td>82</td>
<td>25</td>
</tr>
<tr>
<td>Highest quartile</td>
<td>85</td>
<td>28</td>
</tr>
<tr>
<td>Income refused or don’t know</td>
<td>83</td>
<td>27</td>
</tr>
</tbody>
</table>

Source: Inglehart and Rabier (1986, 23).

“very happy” has remained roughly constant since 1957, despite personal consumption expenditures per capita having roughly doubled (Durning 1991, 156–158).

Why is it that money doesn’t buy much happiness, and only does so up to a point? We will consider two answers to this question, the first rooted in the psychology of consumption, the second in the material realities of modern life.

11.2 Social Norms and the Rat Race

Here is Adam Smith (1966), writing in the year 1759:

From whence, then, arises that emulation which runs through all the different ranks of men, and what are the advantages which we propose by that great purpose of human life which we call bettering our condition? To be observed, to be attended to, to be taken notice of with sympathy, complacency, and approbation are all the advantages which we can propose to derive from it. It is the vanity, not the ease or the pleasure which interests us. (70)

I have an eleven-year-old friend, who recently reported to his mother that he wanted a pair of brightly colored, baggy pants manufactured by a company called Skidz. These pants were retailing for $54, and so his mother was a bit reluctant to buy him the pants. She offered to make him a pair that looked and felt identical, figuring she could do that for as little as $10. “No way,” said her son. The homemade pair would not have the Skidz label on the back and that was really what made them cool. She asked him if he really wanted her to spend $44 for a label, and he said without hesitation, “Yes.”

In our affluent society, access to food and shelter sufficient for basic survival is widely, though not universally, available. Under these circumstances, much consumption of goods and services takes on a profoundly “social” character. The utilitarian value of the Skidz pants—their warmth, comfort, and cheerfulness—was much less important to my friend than the fact that they were “way cool.” Along the same lines, the pleasure felt by the owner of an expensive sports car lies not only in the excitement of fast driving, but also, and perhaps more importantly, in the image of a fast-driving man the car provides to both the owner and others.

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3The growth in demand at homeless shelters and soup kitchens in our country reminds us of the severity of this problem.
The social norms that we satisfy through our consumption are established in the communities in which we seek membership and recognition. The type of community may range from a romantic community of two, to the nuclear or extended family, to a circle of friends, to a neighborhood, to a religious or ethnic group, to a union or professional organization, but the need to belong to at least one of these groups is a powerful motivating force. Critics of growth argue that much of our consumption—from the clothes we wear, to the food we eat, to the cars we drive—is geared not only or even primarily to attain physical warmth, nourishment, comfort, or transportation, but rather to attain membership and recognition in one of these communities.

The point here is not to pass a value judgment on this process in which we all participate. Rather, the idea of consumption norms simply explains the observation that money fails to buy much happiness. On the one hand, greater income increases access to intrinsically useful goods and services. On the other, as people grow wealthier the expectations of the community rise, and keeping up with social consumption norms becomes more costly.

One can divide the social motives for consumption into three rough categories: bandwagon, snob, and Veblen effects (Leibenstein 1950). Bandwagon effects refer to a desire to consume something because others are as well, in order to conform to a social norm. Television commercials frequently play on the bandwagon effect. McDonald’s recently ran a campaign advertising “Food, Folks and Fun.” The message was clear: Come on down and join the party, and incidentally, you can eat here too.

At the same time, Burger King was trying to set itself off from the crowd with its slogan: “Sometimes, You Gotta Break the Rules.” The appeal here was to the snob effect—the desire to do or consume something because others aren’t. The snob effect is usually attributed to those buying expensive products to differentiate themselves from the common herd. But the sentiment may also be exploited, as in the Burger King case, to sell the humble hamburger. Or to take another example, it can be seen in the college professor who takes pride in driving a beat-up car to show that he, unlike the rest of the world, does not care about material goods. The desire for Skidz pants expressed by my friend’s son showed both bandwagon and snob influences—they were cool both because cool people were wearing them and because uncool people were not.

The words “bandwagon” and “snob” are perhaps poorly chosen, because they have rather negative connotations. But the desire to join in and the desire to be different in fact reflect quite normal, universal, and important social drives. For example, the desire to “get ahead” in any pursuit—sport, music, science—reflects both the snob effect (get ahead of one’s peer group) and the bandwagon effect (become like those who are already ahead).

The final social motive underlying consumption is named for Thorstein Veblen, an economist who argued that status could often be achieved in our society through the open display of wealth, what he termed “conspicuous consumption.” The Veblen effect is the purchase of expensive goods in order to illustrate to the community that the owner is a person of “substance”—that is, someone with money and the power that money brings. Its purpose is to elicit envious statements such as “He wears a

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4 Bagwell and Bernheim (1996) explore the microfoundations of Veblen-type consumption decisions in a signaling context.
5 For a recent reformulation, see Bagwell and Bernheim (1996).
Rolex” or “She drives a BMW” or “He belongs to the High Society Country Club.” Part of the “coolness” of Skidz pants was certainly their high price—wearing them said to the rest of the kids in the class: “My parents have got the power to get me what I want, even if it costs a lot of money.” While the Veblen effect is related to the snob effect, the two are not identical. Veblen goods hold appeal primarily because their expense denotes membership in a certain social class; as noted, the definition of a snob good varies from consumer to consumer and need not involve expensive goods.

To the extent that material consumption is not geared to utilitarian functions but is rather a means to an end of satisfying social needs for membership and status in a community, it is not surprising that attaining more material goods fails to increase happiness to any significant degree. Among both poor and rich, bandwagon and snob effects will greatly influence the degree of satisfaction obtained from consumption. Whether it is the right sound system to impress your friends, the right bike for joining a motorcycle gang, the right T-shirt to wear to a party, the right beer to serve at a cookout, the right restaurant to please your sweetheart, the right suit to keep your job, the right school for your children, or the right street address to get into a particular golf foursome, membership and recognition in the community is an important by-product of consumption. As people get wealthier, “basic” needs multiply; in other words, it costs more to satisfy social norms.

Having said that, it is clear that many people do want more material things. Indeed, survey research reveals that “getting ahead” in terms of income is clearly correlated with increases in reported life satisfaction. While rich people are on average only a bit happier than poor people, people who have recently gotten richer are much more satisfied with their lives than people who have recently gotten poorer. Social satisfaction from consumption apparently requires not just keeping up but getting ahead of “the Joneses.” Exceeding the consumption norms established by one’s peer group, family, and personal expectations appears to be the material route to happiness.6

However, while “getting ahead” may make sense from the individual perspective, competitive consumption is a strategy that yields much smaller benefits to individuals when pursued at society-wide level. If everyone is racing for entry into the next highest social group, it becomes much harder to get there; and for every winner in the race, there will be losers. Moreover, everyone now needs to run harder just to stay in the same place.

The common name for this kind of situation is a rat race. The two distinguishing features of a rat race are that (1) everyone would be better off if the race was canceled, and (2) given that everyone else is racing, each individual is better off trying to win.

This situation can be analyzed through the so-called prisoner’s dilemma model. (Suggestion: Split your class by asking your professor to explain the name “prisoner’s dilemma.”) Figure 11.1 illustrates the situation facing two students, Arnold and Maria, who have been asked to bring soft drinks to a party. Each student can choose to bring either Coca-Cola or budget cola. For the purposes of argument, assume that the quality of the products are identical—blindfolded, people on average don’t prefer one to the other. (Suggestion: Split your class by bringing in supplies for a demonstration taste test.) But Coke, given its large advertising budget, has developed some name recognition.

Suppose that the initial social norm among the students is to drink the budget brand. If both parties then go for the budget brand, nobody is embarrassed by bringing

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6These ideas are developed further in Mishan (1968), Scitovsky (1986), Daly (1987), and Schor (1991).
a product perceived to be cheap. As a result, the utility of both students is 10. This is clearly preferred to an outcome in which the social norm is to buy Coca-Cola—since the quality is the same, and the cost is higher. As a result, the Coke—Coke outcome yields utility of only 8 to each student.

But in this setup, it will be hard to maintain budget—budget choices as the social norm. Consider what happens if Arnold goes budget while Maria shells out for Coke. Maria receives (subtle) praise for exceeding the social norm, so her utility rises to 12, while Arnold is (quietly) shamed and finds his utility falling to 7. The same holds true in reverse if Maria buys budget while Arnold goes with Coke.

While both parties would prefer the budget—budget outcome, both have strong incentives to “cheat” on any informal agreement to maintain the budget—brand social norm. If on the one hand, Maria chooses budget, Arnold can gain at Maria’s expense by exceeding the social norm and going for Coke. If on the other hand, Maria exceeds the norm, Arnold is better off defending himself by doing the same. Regardless of what choice Maria makes, Arnold is better off choosing Coca-Cola, and vice versa.

Landers, Rebitzer, and Taylor (1996) identify a real-world prisoner’s dilemma operating in professional organizations. They find in a survey of legal firms that attorneys are “overworked” in the sense that they would like to trade increases in income for time off. But publicly, lawyers are afraid to admit their desire for shorter hours, fearing that this will signal to partners that they are unproductive (even if they are not). As a result, the social norm for hours worked is too high—everyone would be made better off if a lower-standard workweek could be agreed on and enforced. This change in norms would scale back the rat race, lowering both incomes and material consumption, while raising leisure time.\(^7\)

By framing the rat race as a prisoner’s dilemma, we can see how social consumption norms get ratcheted upward. A rat race will often emerge whenever people send social signals through their consumption or workplace behavior, and especially when bandwagon, snob, or Veblen effects dominate the motives underlying the desire for more material goods. And, if the social satisfaction obtained from material gain is indeed

\(^7\)The authors frame their argument in a signaling context. The key assumptions are that the pool of professionals reap spillover benefits from having more productive team members, and that long hours are a signal for high productivity. For more on overwork, see Schor (1991) and Application 11.1.
dependent on surpassing one’s neighbors, economic growth simply cannot quench the
social desires that people attempt to satisfy through increased consumption.

11.3 Positional Goods and Consumption Externalities

One reason that money does not seem to buy much happiness is because of the social psy-
chology of consumption. However, another reason is rooted in the realities of modern-
day growth. One of the paradoxes of our affluent society is that, even as we grow
wealthier, access to certain goods becomes more and more difficult. Consider the wide-
spread shortage of “affordable housing” in the United States. In the 1970s, when median
family income was about the same in real terms as it is today, the average mortgage pay-
ment on a house was about 18% of family income. Now it is 30% or higher, effectively
putting home ownership out of the reach of an increasing number of Americans.

Paradoxically, the housing shortage is occurring at the same time that many cities
face massive vacancy rates: Boarded-up buildings are a common sight in many of our
cities. The shortage is clearly not one of housing units but rather of units in “desirable”
neighborhoods: ones that are prosperous and safe, and have good schools. However,
housing in desirable neighborhoods is a good for which there is either a fixed or at least
very inelastic long-run supply. Thus, one effect of the massive “suburbanization of
America” that has been occurring over the last forty years has been an increase in the
price of housing within the commuting shadow of all major cities. At the same time,
these areas developed many of the urban problems that people were attempting to
leave behind: increasing congestion, traffic jams, longer commuting time, higher crime
rates, and in general a lower quality of life for residents. Simultaneously, citizens left
behind in the inner city have seen their communities deteriorate drastically as mem-
bers of the middle class fled to the suburbs, shrinking the tax base of the cities.

Driving this process has been increased private demand for “better housing.” While
many individuals did get such housing, the social outcome was less positive. The limited
supply of this good in the suburbs was rationed through both higher prices and increased
congestion. Concurrently, property values in the cities plummeted, and the quality of life
for many residents there has become increasingly desperate. Two economic concepts
help explain this phenomenon: positional competition and consumption externalities.

Goods with a fixed or inelastic long-run supply, such as uncrowded suburbs within
an easy commute to the city, are referred to as positional goods. **Positional competi-
tion** is the competition for these goods. Some simple examples of positional goods are
fifty-yard-line Super Bowl tickets, Rembrandt paintings, or spacious seaside vacation
homes. Less obvious examples include commuter highways, slots in prestigious four-
year colleges, creative work, jobs with status and authority, green space in the city,
accessible wilderness, and clean air and water.

As people grow wealthier, the demand for these positional goods increases. In the
face of this growing demand, some rationing scheme is necessary. For privately owned
goods, say football tickets, the price rises to eliminate the excess demand and clear the
market. For many public goods, however, the price mechanism is ineffective. Here the
rationing takes place through congestion, for example, as seen in traffic jams.

Higher relative prices for positional goods combined with increasing conges-
tion in their consumption has generated a degradation in the quality of life for many
people, at the same time that the per capita consumption of TVs, dishwashers,
camcorders, fast-food outlets, computers, pain relievers, and a million other commodities has increased. To obtain access to many of the goods that people took for granted only a generation ago, we must either pay a higher proportion of our income or accept a degradation in quality. This is not to say that economic growth has been on the balance negative. The point is that increased positional competition generates an important and often unrecognized cost of economic growth.

Hirsch (1976) likens positional competition to a concert hall, where the individuals in the front row stand up to get a better view, and then everyone in the entire area has to stand. Eventually, everyone is uncomfortably up on their tiptoes, but no one can see any better than they could while sitting down! Once again, getting ahead makes sense from an individual perspective, but the social result is to leave everyone worse off.

Positional competition often generates consumption externalities. These are benefits and costs of consumption not borne by the consumer—in Hirsch’s example, blocking a neighbor’s view. Or consider the private decision to commute by car. Although it may save twenty minutes of the driver’s time, it also reduces the speed at which others can get to work by contributing to traffic jams. More generally, the cumulative effect of thousands of private decisions to move to the suburbs is to introduce many of the problems of the city: increasingly depersonalized communities, deteriorating schools, rising crime rates, and environmental degradation.

Positive consumption externalities, on the other hand, play an important role in creating a livable neighborhood. For example, if a neighbor keeps up his house and yard in an attractive fashion, it increases the value of the surrounding property. Sociologist William Julius Wilson has argued that many of the problems facing inner-city minority teenagers, from unemployment to drug abuse, stem from the lack of a vital positive externality—middle-class role models among their neighbors (Wilson 1987).

Consumption externalities are important in other markets beside housing. An individual’s decision regarding educational attainment has important externalities, both positive and negative. On the one hand, there is such a clear social benefit to having a populace able to read and write that all agree the government must subsidize and indeed mandate a basic education. On the other hand, advanced education is in many respects a type of positional competition. One’s decision to obtain a master’s degree in business administration increases one’s chance of getting a scarce “prestige” job, but at the same time decreases the chances of those without the degree. “Credentials inflation”—the competitive process by which degree requirements for entry into a given career are ratcheted upward—is a negative consumption externality.

Pure positional competition is what economists call a zero-sum game. For every person who gains access to a positional good, someone else must give it up. As positional goods become more important in our economy, increases in income channeled into this competition fail to be translated into overall increases in human welfare. This holds doubly true when consumption decisions bear important negative externalities, as in the case of housing and advanced education. These two factors help explain the paradox that although individuals act rationally to increase their wealth, collectively we fail to grow much happier.

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8 Of course, advanced education can have positive consumption externalities as well. Improvements in technology resulting from advanced training is the most obvious example.
11.4 Welfare with Social Consumption

It is useful to recast the arguments of the preceding section into our utility/social welfare function framework. To do so requires that we divide up each individual’s consumption bundle into competitive and noncompetitive elements, $X^c$, $X^{nc}$. The former contains (1) rat race items—those that bring utility primarily because their consumption involves exceeding social norms; (2) positional goods; and (3) goods with significant negative consumption externalities. The noncompetitive bundle includes everything else: goods consumed primarily for their intrinsic utility (taste, warmth, relaxation); leisure time spent with family and friends; physically or intellectually challenging activities; and many environmental goods such as clean air, water, and health.

In practice, this competitive/noncompetitive distinction may be a difficult one to make. Under which category does bike riding fit? The biking experience itself is very noncompetitive, and yet some of the pleasure serious enthusiasts feel for the sport is driven by competitive social norms—wearing the latest clothing or owning the most up-to-date machine. Yet in principle it is possible to sort out the consumption components that are fashion- or status-driven from the consumption components of the sport itself.

By doing so, we can rewrite Aldo’s utility function as:

$$ U_A = U(X^{nc}_A, X^c_A, X^c_{NA}) $$

The last term, $X^c_{NA}$, stands for the competitive consumption bundle of all people who are Not Aldo (NA); the negative sign above $X^c_{NA}$ indicates that Aldo’s happiness decreases as the social consumption of others goes up. Aldo still gets happier by increasing his consumption of both noncompetitive ($X^{nc}_A$) and competitive goods ($X^c_A$); more remains better for Aldo as an individual. But his overall happiness now depends on the consumption levels of his peer group.

There are two lessons to be learned from this form of the utility function. The first is that economic growth that increases the supply of competitive consumption goods need not increase happiness (though it may). Every time one person gets ahead, a new standard is set for the community. Indeed, competitive consumption goods are often sold by making people who don’t buy the product feel worse off! (Consider, for example, the typical deodorant campaign that exploits insecurities about being left out and unhappy.)

The second lesson is that, under this form of the utility function, increases in the stock of noncompetitive consumption goods unambiguously raise social welfare. Many if not most environmental “goods”—human health, appreciation of natural beauty, respect for both human and nonhuman life—are primarily noncompetitive. One person’s enjoyment of his health does not “raise the standard” to which others must aspire. Similarly, land set aside for parks is land not available for private development as part of status-enhancing positional competition. Thus a case can be made for weighting these items more heavily than material consumption in a social welfare function.

What are the economic implications of all this? Brekke and Howarth (2002) show that, when relative consumption becomes important, three conclusions emerge. First, taxes on the consumption of status goods become efficient; they
increase overall well-being by discouraging excessive work effort and increasing leisure. They also reduce unnecessary production and thus pollution. Second, people tend to overvalue increases in private consumption (given the negative externalities imposed on others), and undervalue noncompetitive public goods and improved environmental quality. Thus willingness-to-pay measures need to be adjusted upwards to reflect the true increase in well-being generated by a cleaner environment. In the case of global warming, for example, they estimate that the efficient tax on carbon dioxide is 50% higher than that yielded by conventional benefit-cost analysis.

Finally, in economies where status goods are important, GDP growth fails to capture real increases in social welfare on yet one more ground. As discussed in Chapter 6, economists have in fact made several attempts to construct a social welfare index that reflects some of the disamenities of economic growth. The idea is to adjust our basic measure of economic growth—GDP—to better capture the “true” trend in social welfare over the last few decades. If you turn back to Table 6.3, you will find a description of the Genuine Progress Indicator, or GPI.

GPI claim proponents to have uncovered a dramatic slowdown in improvements in the average quality of life over the last few decades, while GDP continued to rise at a steady pace. The GPI does this in part by accounting for the negative consumption externalities arising from positional goods discussed in this chapter. For example, in addition to the conventional externality costs, Daly and Cobb deduct from augmented GDP the costs of urbanization, increased commuting time, and auto accidents. They also subtract the rising price of land.

Yet for purposes of the index, the GPI researchers accept the conventional assumption that “More is Better.” According to the GPI authors: “Our calculus of economic well-being has failed to take into account that happiness is apparently correlated with relative rather than absolute levels of wealth or consumption. Having more is less important than having more than the ‘Joneses.’ Yet in the absence of any way to quantify this sense of relative well-being, we have ignored this important finding in our index, just as others have” (Daly and Cobb 1989, 415). If they had devised such a measure, it seems likely that net national welfare would have increased even less than they estimate over the past thirty years, despite the tremendous growth in GDP.

To summarize: If social norms drive much material consumption, and positional goods and consumption externalities are relatively important in the economy, a strong utilitarian argument can be made for environmental protection. The happiness trade-off between environmental protection and economic growth is not as great as it seems.

11.5 Controlling the Impact of Consumption

A society in which consumption becomes the primary means of achieving social status is known as a consumer culture. The reasons for the advance of the consumer culture in rich countries are complex, including factors as diverse as the increasing mobility of both workers and jobs and the subsequent breakdown in community, increasing exposure to television and advertising, and a decline in the moral influence of religion, which traditionally preached an antimaterialistic message.
Some people have argued that as environmental awareness spreads, people in wealthy countries can be persuaded to abandon their affluent lifestyles, and begin, for example, riding bikes to work. Yet, the advance of the consumer culture appears to be pervasive and very deep-seated. I see it best through a comparison of generational attitudes. I admit to being a bit shocked when I asked my six-year-old niece why she wouldn’t let me cut the huge L.A. Gear tag off her new tennis shoes. “That’s what makes them cool,” she said. My young niece’s strong brand identification—the shoes made her happy because of the label—was the result of a shift in marketing strategy by clothing firms. When I was small, firms marketed children’s clothes to their parents, and the emphasis was on rugged and practical. Now Saturday morning cartoons are filled with clothing ads targeted directly at children, with the emphasis on beauty and status. My parents, of course, had much less exposure to marketing and find my attachment to many of our family gadgets a bit puzzling.

Thus, even if you believe that high levels of consumption in affluent countries are a major environmental threat, it is hard to imagine making much headway against the consumer culture via moral arguments alone. This section discusses two potential economic instruments for reducing consumption: consumption taxes and the regulation of advertising.

From the IPAT equation we know that the environmental impact of consumption can be reduced either by reducing consumption directly or by cleaning up the technology associated with producing and delivering consumption goods. The second strategy appears more attractive, both because it seems to entail less sacrifice and because it can accommodate the increasing demands of poor countries for a higher material standard of living. But in fact, as we shall see in this section, developing cleaner technologies also requires reducing consumption today in order to finance investment in research and development.

Many economists have argued for nonenvironmental reasons that the U.S. consumption rate is too high, or equivalently, that the national savings and investment rate is too low. During the 1980s, national savings declined from around 8% to 2.4% of net national product and by 2000 had actually gone negative, while the foreign debt skyrocketed. The argument is made that for the last two decades, we have been financing current consumption at the expense of investment in created capital, which in the words of economist William Nordhaus portends a “decline in living standards for the future” (Nordhaus 1989). Nordhaus makes, in effect, a nonenvironmental sustainability argument for reducing current consumption.

Nordhaus and others have called for an increase in taxes (income or sales) to reduce consumption and increase savings and investment. The ultimate purpose, however, is to boost consumption in the future. This is clearly not the policy goal proposed here. Yet, if the revenues from such a tax were invested in the generation of new, clean technologies, such as those discussed in Chapters 18 and 19, this kind of policy could achieve the goal of reducing the environmental impact of consumption. This would be true despite the fact that consumption levels themselves had only temporarily declined.

Alternatively, taxes could be used to divert resources away from consumption in rich countries to sustainable development efforts in poor countries. Funds could be

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9The existence of the savings rate decline has been challenged by, among others, Blecker (1990), who is nevertheless still worried about inadequate investment.
used for a variety of purposes, from debt relief, to family planning, to land reform or resource protection efforts, to transferring clean energy and manufacturing technologies to poor countries.

It is sometimes argued that high levels of consumption are necessary for a modern economy to operate, and that a reduction in consumption would lead to high levels of long-run unemployment. Does such a consumption–employment link exist? Not in the long run. For example, assume the government raises $100 million in taxes to pay for condoms for use in the developing world. In this case, the $100 million fall in consumption is made up for by an increase in spending in the birth control industry. Intuitively, as jobs are lost in the tourism industry (consumption), they are added in the manufacturing of new birth control devices. While short-run unemployment may increase, in the long-run workers will be able to find new jobs.\(^{10}\)

The point here is that consumption reductions in rich countries need not imply output or employment reductions. Rather, the drop in consumption can be matched by an increase in consumption in poor countries, which can provide jobs in rich countries. (Such an increase in consumption in poor countries is desirable on environmental grounds for reasons discussed in the last part of this book.) Or consumption reductions may be matched by an increase in savings and investment in rich countries, which also provide employment. If this investment is focused in the direction of developing clean technologies, then the goal of reducing the environmental impact of consumption will have been achieved, despite the fact that overall consumption in the affluent country declines only temporarily.

As a final point, in rich countries, social consumption theory has a rather startling implication: Beyond an initial adjustment period, in which people lowered their expected consumption levels, a shift of resources from current consumption to investment or development assistance would not reduce overall social happiness or welfare.

Put in more practical terms, suppose that income taxes in the United States were raised gradually in a progressive fashion, so that ultimately the highest group faced a marginal tax rate of 50%, while poor Americans maintained the same tax rate. Suppose as well that the additional money raised was diverted to investment in environmental technology: to the training of scientists and engineers, and to research and development. Social consumption theory says that in the long run, on average, people would be just as content. (Incidentally, wealthy Americans did pay a 70% marginal tax rate or higher throughout the 1950s, 1960s, and 1970s.) The problem with this theory, of course, is that there is an initial adjustment period in which people are dissatisfied. Given this, the political prospects for new taxes to promote sustainability—either environmental or economic—are not favorable. For example, President Clinton’s energy tax proposal of 1993, which targeted deficit reduction, was watered down to a small increase in the gasoline tax. Even then, it passed by a very narrow margin.

Beyond taxes, a second possible strategy for controlling consumption is to regulate advertising. For such a strategy to make sense, one must first make the case that advertising in fact raises aggregate consumption levels. It is possible that advertising merely causes people to switch brands, leading to no overall increase in consumption.

\(^{10}\)For a more involved discussion of the business-cycle macroeconomic impacts of consumption-reducing tax increases, see Nordhaus (1989) and Moore (1990). The former concurs with this analysis; the latter presents a less optimistic, post-Keynesian rejoinder.
On the other hand, in the United States, we receive massive exposure to advertising. Indeed, TV might be thought of as the church of the late twentieth century. By the time the typical American reaches college, he or she will have spent three to four hours a week watching TV ads, about 100,000 of them in all (Durning 1991). These advertisements all preach a variation of the same underlying social message: satisfaction through purchase. Such a constant propaganda barrage may well induce us to consume more than we otherwise would.

Assuming that advertising does have a major positive impact on overall consumption, effective regulation of advertising remains a difficult task. From an economic point of view, advertising plays a very important function—fostering competition by providing consumers information about the availability, quality, or price of a product. Advertising can be thought of as a useful product itself, the production of which generates a negative externality, in the same way that paper production generates water pollution. Regulation should focus on controlling the negative externality—the promotion of consumer culture—rather than the product itself.

One way this has been traditionally accomplished is through the regulation of advertising on children’s television. The government sets limits on the number of minutes per hour that can be devoted to advertising and has in the past prohibited the mixing of advertisements and entertainment. These regulations were dramatically loosened in the early 1980s under the banner of deregulation by the conservative Reagan administration but were tightened up somewhat in the early 1990s (Durning 1991).

Another way to try and sort out “good” commercials from “bad” ones is by medium. Ads in the print and radio media have a harder time exploiting emotional weaknesses to develop brand identification than do television ads. They thus tend to provide much more useful information about price, quality, and availability. Local and trade-specific advertising also tend to be more information intensive than national advertising does. Perhaps reflecting the limited economic usefulness of national television advertising, many European countries have commercial-free television. (They finance the production of TV programs with tax dollars.)

In the United States, one possible policy measure would be to institute a “pollution tax” on national TV advertising. As with any tax, such a measure would cause firms to shift resources away from television to other media, or out of advertising altogether.

In the long run, any successful attempt to rein in the growth of per capita consumption in rich countries will require a broad social movement that challenges the consumer culture and its values head on, a discussion well beyond the scope of this book. Economic analysis does provide us with some useful insights, however. First, policies of shared sacrifice may in fact lead to little reduction in overall welfare, if the happiness derived from consumption is relative. If this view is widely held, it suggests people will more likely accept a tax increase to reduce their consumption for a “good cause,” such as their children’s welfare. Second, reducing consumption in rich countries need not

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11For a discussion of the economic costs and benefits of advertising, see Scherer (1980).
lead to an increase in unemployment. Rather, labor and other resources can shift into production of goods for consumption in poor countries or into investment in clean technologies. Finally, a common proposal to restrict the advance of consumer culture, regulation of advertising, must be approached carefully because of the economic benefit—information—that advertising can generate.

11.6 Summary

The central metaphor behind benefit-cost analysis and the efficiency standard is a perceived environment-growth trade-off. More environmental protection in the form of regulations, bans, and red tape means higher costs and ultimately fewer “goods” for consumers. Princeton economist Alan Blinder asks, “Why should everyone be required to have a Cadillac environment, ‘regardless of the cost’?” (Blinder 1987)

Overconsumption critics respond in two ways. First, ecological economists argue that technology is increasingly less capable of providing substitutes for natural capital, and that the long-run costs of “business as usual consumerism” are much higher than efficiency advocates envision. Second, some economists have questioned the fundamental assumption that more is better, which underlies Blinder’s defense of efficiency. Because much of the satisfaction derived from consumption is social rather than intrinsic in nature, and because of the negative externalities in the competition for positional goods that growth engenders, the benefits of economic growth are much smaller than conventionally measured.

If the more is better assumption underlying efficiency analysis is often simply wrong, then the case for pursuing safety or ecological sustainability instead is strengthened. When more isn’t better, “efficient” outcomes aren’t really efficient, that is, welfare enhancing. As a result, stricter safety or ecological sustainability standards may actually be more efficient than an approach grounded in conventional benefit-cost analysis.

The global impact of consumption growth is becoming larger as more and more people look to material consumption to satisfy social needs for membership and status in a community—the advance of consumer culture. Two policies were explored for controlling the growth of consumption. The first was a tax, with the proceeds going to finance either investment in clean technology or increased consumption in poor countries. An important point is that declines in consumption in rich countries need not reduce overall employment; instead, they can represent a shift of resources including labor into other productive sectors. However, as social consumption theory predicts, tax policies lower utility in the short run, and are thus very difficult to sell politically.

The second policy involved regulating advertising, on the grounds that it promotes the growth of an unsustainable consumer culture. The danger here is that advertising can play a useful economic function, providing information and promoting competition. One possibility would be a “pollution tax” on national television advertising, which tends to be heavy on emotional appeal and low on information content.

This chapter concludes the first part of the book, and our discussion of “How much pollution is too much?” At one end of the spectrum we have considered efficiency as a target. In learning about the efficiency standard, we explored the tools that economists have developed to measure environmental protection benefits and costs, and the use of
benefit–cost analysis. We have also examined the logic of promoting efficiency over time (dynamic efficiency) through discounting, granting the neoclassical assumption that technological progress will offset all resource shortages and that, as a consequence, human welfare will continue to rise.

At the other end of the spectrum, we have considered two stricter standards: safety and ecological sustainability. Both these approaches reject benefit–cost analyses and argue for protecting the environment “regardless of the cost.” But in evaluating these approaches we learned that there really is no such thing as a free lunch; ultimately trade-offs do emerge, even if they are not as severe as neoclassicals believe.

So, how much is too much? This ultimately is a values question and cannot be resolved by economics alone, but the goal of the last eleven chapters has been to provide information and analytical tools you need to better resolve the question in your own mind. In the next presidential election, global warming is likely to be an important issue. Whether you support a candidate speaking for an efficiency, a safety, or an ecological sustainability standard for carbon dioxide emissions, you now have a better understanding of the issues at stake in your decision.

**APPLICATION 11.0**

**Overworked Americans**

In the United States, the flip side of increasing consumption over the last thirty years has been increasing hours of work. Schor (1991) calculates that on the average, full-time employees worked an additional 163 hours per year more in 1987 than they did in 1969. For men, the increase was about 98 hours, for women, 305. The increase arose because of both longer hours per week and more weeks worked.

The increase in hours of work is surprising first because it goes against historical trends: Until 1940, the length of the workday fell continuously, and workers gained additional vacation time. This forward progress has continued in most European countries, which have strong unions. U.S. manufacturing employees work almost two months per year longer than their German or French counterparts.

The increase in work hours is also surprising because economists assume that leisure is a normal good: As people get richer they should consume more of it. Instead, leisure appears to be an inferior good. Since 1948 U.S. output per worker has more than doubled: In other words, we could consume at the level of our parents in early adulthood, and *take every other year off*. Instead, we work a little harder and consume more than twice as much.

1. Schor identifies two chief culprits behind the increased workweek: hiring incentives and the lack of a strong union movement to push for shorter hours. As far as incentives go, in spite of the fact that employers must, by law, pay time and a half for overtime, they seem to prefer this to hiring new employees. Why do you think this might be?
2. Among salaried and professional employees, Schor argues that increased competition has led to a natural upward progression in hours spent at the office. The monster workweek experienced by young doctors is becoming common for corporate lawyers, accountants, architects, and other professionals. In an increasingly competitive environment, "enough" is defined not by some pre-existing standard like the length of the workday, but by the limits of human endurance" (Kanter, as cited in Schor 1991, 70). Some economists respond: There is nothing wrong with this lengthening of the workweek. If people didn’t like it, they could just quit and choose less demanding jobs, with more leisure and less consumption. Do you agree?

KEY IDEAS IN EACH SECTION

11.1 This chapter considers arguments that economic growth in affluent countries fails to deliver increases in welfare. The Easterlin paradox refers to survey data showing that increases in income boost reported happiness only slightly, and only to about the median income level.

11.2 One way to explain the Easterlin paradox is that satisfaction from consumption depends on one’s consumption relative to social norms. Social consumption patterns are influenced by bandwagon, snob, and Veblen effects. When people attempt to obtain happiness by competing in consumption levels, the process often degenerates into a self-defeating rat race, which can be modeled as a prisoner’s dilemma.

11.3 Positional competition is competition over goods with a limited long-run supply, or positional goods. Private positional goods are rationed by their increasingly high price; public goods are rationed by congestion. Competition over pure positional goods is a zero-sum game. Negative consumption externalities are often generated through positional competition.

11.4 This section illustrates how the utility function changes in the presence of social consumption and positional goods. Goods must be divided up into competitive and non-competitive consumption bundles. While more of everything is still better at the individual level, externalities generated by other's consumption now depress each individual's utility. It is thus no longer true that increases in society-wide consumption must increase happiness.

11.5 A consumer culture is one in which the primary means of achieving social status is via material consumption. Two economic policies for reducing the spread of consumer culture are consumer-reducing taxes and the regulation of advertising. However, economic tools can change attitudes only if they are part of a much broader cultural movement.
REFERENCES


