

# The basics of consumer protection: principles and policies

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Consumer policies are designed to protect consumers from physical or financial damage that may result from personal or household use of goods and services (Lane 1983). Their aim is to support households in their efforts to utilize their resources in an efficient manner. These policies influence the information available to consumers when they buy a good, the skills they possess to process this information, the likelihood that the product they buy results in physical damage, and the avenues open to obtain redress should they be dissatisfied with the purchase.

Those who stand to gain the most from consumer policies are the most vulnerable groups in society, such as the illiterate and the elderly. Not only do the members of such groups usually have less income to satisfy their material needs, they often lack the skills to determine how to spend their resources effectively.<sup>1</sup> In a country without consumer policies, the poor not only have the problems associated with low incomes, but also obtain less value for the money they spend.<sup>2</sup>

The main problems faced by consumers are excessive price and low quality. Excessive price may be due either to market power (a topic beyond the scope of this chapter) or to deceptive business practices, such as products that do not meet their advertised claims. The quality problem arises when attributes of goods and services turn out to be below the standards (explicitly or implicitly) announced by the seller and expected by the buyer, for example, safety and durability. Thus low-quality goods include a ladder whose faulty design puts the user at risk of physical harm, a toy that breaks when a child uses it as the instructions or common usage suggest, and a contractor that takes much longer than convened. Put differently, most problems faced by consumers fall under the heading "hidden quality." Because of informational asymmetries, what consumers believe they are buying sometimes differs considerably from what they actually purchase.

Some argue that in addition to protection from hidden quality problems, consumers require protection from their own actions. This argument is offered to justify mandatory seatbelt laws, for example. Both kinds of protection differ at a basic level, since only the latter involves a paternalistic attitude toward consumers.

## Basis for consumer policies

Many view consumer policies as a means to promote consumer rights. The following consumer rights are widely accepted:<sup>3</sup>

- *The right to safety.* The right to be protected against the marketing of goods that are hazardous to health and life.
- *The right to be informed.* The right to be protected against fraudulent, deceitful, or grossly misleading information, advertising, labeling, or other practices, and to be given the facts needed to make an informed choice.
- *The right to choose.* The right to be assured, whenever possible, of access to a variety of products and services at competitive prices; and in those industries in which competition is not workable and government regulation is substituted, an assurance of satisfactory quality and service at a fair price.
- *The right to be heard.* The right to be assured that consumer interests will receive full and sympathetic consideration in the formulation of government policy and fair and expeditious treatment in its administrative courts.
- *The right to recourse and redress.* The right of access to proper redress—through swift, effective, and inexpensive procedures—for injury or damage resulting from the purchase or use of defective goods or unsatisfactory services.
- *The right to consumer education.* The right to gain the knowledge and skills needed in managing consumer resources and in taking actions to influence the factors that affect consumer decisions (Bannister and Monsma 1982).

Although formulating consumer rights is an effective way of focusing public attention on consumer issues, the



implementation of those rights cannot be based only on a statement of principles. Consider, for example, the right to safety.<sup>4</sup> There is no such thing as a totally safe product: Many products can cause physical, economic, or psychological harm. When a product becomes "hazardous to health and life" is difficult to judge. From the point of view of consumer protection, the relevant question is not whether products are safe, but whether market forces result in efficient levels of safety in consumer products.<sup>5</sup> A further complication is that because safer products are usually more expensive, requiring safer products can make it impossible for certain consumers—usually middle- and low-income consumers—to afford the cost of the good.<sup>6</sup>

Car safety regulations are a good example. In industrializing countries, auto bodies are thinner and minimum size requirements less stringent than for the same model in industrial countries. When specifying auto safety requirements, authorities face a trade-off between reducing the number of automobile fatalities and making cars available to a larger fraction of the population. Too-stringent requirements will harm middle- and low-income families that would have been able to afford a car had the safety regulations—and the costs of compliance—been less demanding.

An alternative to basing consumer policies on consumer rights is to adopt guidelines for consumer protection, as the United Nations did in 1985.<sup>7</sup> Even though some of the UN guidelines provide useful orientation, others are vague or even misleading. A case in point is guideline 25, which states that "where a standard lower than the generally accepted international standard is being applied because of local economic conditions, every effort should be made to raise that standard as soon as possible" (United Nations 1986, p. 4). The car safety example presented above calls into question the usefulness of international standards for most purposes. And if international standards do exist, it suggests that if they are based on those prevailing in industrial economies, they may be counterproductive.

On the other hand, simple ideas may benefit consumers considerably. For example, fraudulent weights are a problem faced by consumers in many developing countries:

In September 1977, the Consumers' Association weighed loaves of bread from Penang (Malaysia) bakeries. Each fell short of the government standard. . . . Nine brands of rice sold in "39-pound" bags also were caught short. And of 11 brands of soy

sauce, six bottles held half of what the labels claimed. . . . [The association] tested a dozen brands of ground coffee and found that each had less than the required 50% coffee contents. One had just 4.6% (Newman 1981 quoted in Klitgaard 1991).

When a consumer group in Bombay, India, opened a stand at one of the city's busiest markets, it was supplied not with sophisticated information, but with some pieces of basic equipment, including a correctly calibrated scale to detect fraudulent weights (Mayer 1989).

Another example of how information benefiting consumers can be generated at low cost is price surveys. In 1984, shortly after prices of most consumer goods were decontrolled in Zambia, the Prices and Income Commission began carrying out price surveys in Lusaka. Fifty-eight retail outlets were visited: the prices for goods of similar quality varied considerably. For example, the price per kilogram ranged from 0.65 to 2.00 kwachas (K) for onions, K4.00 to K6.60 for "ordinary mince," and from K0.50 to K2.00 for tomatoes. Klitgaard (1991) provides the following description:

Commission chairman L. S. Chivuno appeared on television and radio and was interviewed in the press. The commission paid for a full-page advertisement in the Zambia Daily Mail that gave all the statistics and named particular stores at both ends of the price range. Commissioner Chivuno decried the 300 percent price differentials on some items. But his main point was simply that "if this kind of information is carried out at given intervals, the information conveyed will assist consumers in being better informed about where prices seem generally to be more attractive (p. 39)."

One of the benefits of requiring certain information to be made available to potential customers is that it helps consumers allocate their resources more efficiently. Credit purchases in developing countries offer a good illustration. Consumers in developing countries often buy durable goods on credit, and the retailer usually provides both the good and the credit. Some consumers have difficulty calculating the true cost of the credit because, first, various indirect costs are involved, and second, calculating a present value is not an easy task for most people. Regulations requiring that the cost of credit be summarized in one index, such as the "effective interest rate" or the present value, help consumers assess the true cost of

the goods they are considering buying and facilitates comparisons.

An understanding of the economics of information is thereby critical to the formulation of consumer policy. Consumers demand information on the attributes of the goods and services they consider buying. The suppliers of this information may be the sellers of the product, third parties such as product testing organizations, or the consumers themselves, who spend time and money trying out products and sharing this information with other consumers.

Viewing information in this light has important consequences for consumer protection. First, it makes clear the desirability of policies that reduce consumers' costs of obtaining information without increasing producer costs significantly. One such policy requires that sellers label their goods not only with the total price but also with the price by a standard unit ("unit pricing"), reducing the time and effort it takes to compare similar products packaged in different quantities.

Second, it raises the question, under what circumstances do the sellers of goods have incentives to voluntarily provide information to consumers that is both truthful and relevant?<sup>8</sup> Third, viewing information as a good also leads to a qualified appraisal of the "right to be informed." Promoting the right to be given the facts needed to make an informed choice ignores the costs involved in generating such information.

### **Market remedies or regulation?**

As with many other issues in economics, consumer policy divides policymakers into two camps. In one camp are those who advocate government regulation; in the other are those who are skeptical of the effectiveness of regulations and seek to rely on market solutions as much as possible. Both groups even refer to the field by different names: those favoring government regulation speak of "consumer policies" while those skeptical of direct government regulation prefer "consumer protection."<sup>9</sup>

The discussion in this chapter avoids differentiating between consumer policies and consumer protection. The view presented here is that consumer issues call for both policies based on the incentives provided by the market mechanism and, where this mechanism does not work appropriately, government regulation.

To illustrate the tension between the two views, consider the ideal world as seen through the eyes of a consumer activist, compared with that of someone skeptical of government intervention. In the consumer activist's "paradise" (adapted from Mayer 1989, p. 135), informa-

tion to make informed purchasing decisions would be easily available from both government-funded product-testing organizations and consumer advisory boards. Convenient neighborhood centers would provide information about any particular purchase and advice about how to file a complaint.

In this world, consumers continually receive valuable information and education through television. Consumer organizations have free access to prime-time television to discuss consumer issues and inform consumers how to avoid rip-offs. No advertising, including political advertising, is allowed on television. And cigarettes, although not banned, carry warnings that smoking kills. Moreover, the government takes measures to protect consumers not only from unscrupulous sellers, but also from themselves. A combination of public and private funds supports a team of trained safety experts who visit homes on request to search out potential safety hazards. The use of automobile safety belts is mandatory, and the government spends the resources required to enforce the belt law.

What would a consumer "paradise" look like from the point of view of a policymaker skeptical of any government intervention? In this world, sellers have a variety of incentives to provide truthful information to consumers. In the case of repeat purchases, it is to sellers' advantage to invest in reputation, since this investment increases their profits. Private product-testing organizations provide useful information about one-time purchases, for example, in widely read consumer magazines. Sellers are also deterred from deceiving consumers because consumers have access to speedy, inexpensive lawsuits. Lawsuits are brought only rarely. And private providers of safety seals not only guarantee, as far as possible, the safety of goods, but also ensure that any reparation for product-related damage is made quickly and at low cost.

In addition, goods are labeled with all relevant information, presented to facilitate understanding. Consumers read this information and make their purchasing decisions accordingly. The result is better-informed decisions without restricting consumer choice. This is desirable since what is dangerous for one consumer may be safe for another. As for advertising, consumers realize when an ad lacks information content and quickly perceive when they are being misled. Producers consequently have no incentive to use deceptive advertising techniques or unfair contract clauses.

Which version of the consumer "paradise" should developing countries strive for? This chapter shows how elements from both idealized worlds can be combined to protect consumers. The policies considered in this chapter

are aimed at modifying the environment faced by consumers, not the behavior of consumers. Policies designed to change consumer behavior are called “consumer promotion policies” and are considered in chapter 7 of this volume. This companion chapter considers such topics as consumer education, consumer redress, and the role of public consumer organizations. It also covers issues such as the political economy of consumer protection and the special case of consumer protection in economies in transition.

### Basic concepts

This section stresses how actual markets differ from idealized, perfectly competitive markets in ways that are central for consumer protection.

While the perfect competition paradigm is useful for other purposes, it is of limited value as an analytical tool for consumer policy. The perfect competition model assumes both rational consumers and costless transactions. A given good costs the same at different stores, and selling and buying do not consume resources. Under rather general conditions,<sup>10</sup> the equilibrium that results is Pareto-efficient, that is, no individual can be made better off without making someone else worse off. Furthermore, all Pareto-efficient resource allocations can be achieved through a competitive equilibrium.<sup>11</sup> Thus any shortcomings of a perfectly competitive economy necessarily relate to the distribution of income and should be rectified by lump-sum transfers.<sup>12</sup>

In a competitive equilibrium, the price consumers pay for a given good does not vary from store to store, and consumers do not spend time and resources informing themselves about prices and quality. Since consumers are omniscient and their preferences immutable, they do not invest resources in assessing the quality and other characteristics of goods they are planning to buy, and producers have no incentives to spend on advertising.

### *Relevant sources of market failure*

Information on the price, quality, and other attributes of goods is often not easily available. Acquiring information on goods and services poses several problems for consumers: They must decide how much time and resources to spend in acquiring this information, they must process the information, and, in a world of uncertainty, they must make their purchasing decisions. Producers face similar problems. They would like to have information on consumer characteristics that is not readily available. Producers sometimes spend resources to acquire this information; at other times, they design products and contracts motivated by the informational shortcomings

they face. In both cases, there are inefficiencies that would not arise if information were freely available.

More generally, almost every economic interaction, both within an organization and among organizations, involves costs other than the price paid for the good or service provided. All such costs are referred to as “transactions costs.” They are the costs of running an economic system and underlie the sources of market failure relevant to consumer policy.<sup>13</sup> Transactions costs may arise from the need to determine prices and other details of the transaction so as to bring buyers and sellers together. The fee charged by a broker when an investor buys equity is an example of such a cost. The time consumers spend comparing prices at different stores—so called search cost—is another example.

An overwhelming proportion of transactions costs are due to “informational asymmetries.” Consumers and producers frequently do not have access to the same information. Producers often know more about the quality of the good they sell than do consumers; consumers sometimes have information that sellers would like to have. For example, selling a good under conditions in which payment is not collected at the time of purchase, as with credit sales, poses the problem for the seller of determining whether buyers will honor their payments. Sellers thus face a hidden quality problem—assessing the “quality” of the borrower. With perfect information, sellers could predict the future and charge a poor risk accordingly. Companies in the medical insurance industry face the same problem: Consumers know more about their health status than insurers do.

When there are informational asymmetries, a variety of phenomena may arise that are not captured by the perfect competition model. Prominent among them are moral hazard,<sup>14</sup> adverse selection,<sup>15</sup> and the principal-agent problem.<sup>16</sup> All these have in common that the market for a specific kind of information fails to develop and therefore may be viewed as resulting from information externalities.

“Externalities” occur when a producer or consumer affects a third party in a way not reflected by prices. A positive externality results when the action of one economic agent (consumer or producer) benefits another without being rewarded. Because there is no reward, the economic agent undertakes the action to a lesser degree (or less often) than is socially desirable. The situation is reversed in the case of a negative externality. Externalities may be viewed as a case in which high transactions costs result in the failure of a market (that for the externality) to exist. They become relevant when it is expensive to

exclude nonbuyers from the consumption of a good (or "bad"), either because this exclusion is technically impossible or because it requires considerable resources,<sup>17</sup> as when the market for an externality involves a small number of buyers and sellers.

To illustrate, consider a consumer who, by spending time and resources complaining about the defective design of a good, compels the manufacturer to improve it. The improved design benefits the complaining consumer as well as all future consumers of the good. Because the assertive consumer is not rewarded by those who benefit from his or her complaints, he or she does not internalize the effect his or her behavior has on the well-being of others. As a result, the "production" of consumer complaints leading to better products is underprovided.

Information is an example of a good whose production may involve positive externalities. A consumer acquires information up to the point at which the private cost of acquiring an additional bit of information equals the private cost of producing it. Since often many consumers could benefit from this additional bit of information at no extra cost, its social benefit exceeds its production costs; thus information is underprovided in a market economy.

In the absence of transactions costs and informational asymmetries, well-defined property rights lead to efficient resource allocation even in the presence of externalities (Coase 1960). Externalities pose a public policy problem either when transactions costs are large or when property rights are not well defined. When transactions costs are significant, the main remedy for the underprovision of positive externalities is subsidizing the production of the good.<sup>18</sup> However, providing these subsidies involves operational and informational costs that should be compared to the expected benefit before such subsidies are implemented.

An extreme case of a positive externality is a public good. A good is public if it is nonrival and nonexclusive.<sup>19</sup> A good is nonrival if once it has been produced, it can be provided to additional consumers at no additional cost. For this reason, it is not desirable to ration such a good. A good is nonexclusive if people cannot be excluded from consuming it, that is, people cannot be prevented from enjoying the good without direct payment. Thus a public good is a nonexclusive good that provides a positive externality to a large number of consumers. It is neither feasible nor desirable to ration its use.

Another instance of market failure is the presence of market power. Firms with market power charge a price that is above their marginal costs, usually resulting in abnormal profits. Ideally, firms would like to charge every customer

the highest price he or she is prepared to pay for a good; this price is the customer's reservation price. When producers charge different prices to different consumers for essentially the same good, they are said to be price-discriminating. That sellers are often prevented by legal or informational constraints from price-discriminating perfectly among consumers implies that most consumers pay less than their reservation price for the goods they buy.<sup>20</sup> The difference between the price a consumer pays and his or her reservation price is called the consumer's surplus.

When the seller and the potential customer determine a good's price by haggling, they are effectively bargaining about how they will split the total surplus generated by their transaction, namely, the sum of the consumer's surplus and the seller's profit (also called the "producer's surplus"). The outcome is inefficient from a social point of view when an agreement is not reached even though there is overlap between the prices at which both the consumer and producer would attain a surplus. Although this simple framework for viewing a transaction between a buyer and a seller omits a number of relevant issues (for example, it takes the market structure as given), it will prove useful later in this chapter in the analysis of remedies for consumer protection.

#### *Irrationality and misperceptions*

In a perfectly competitive world, the price consumers pay and the quality of the goods they buy are unrelated to how rational they are, since all consumers pay the same price for a given good, and goods are homogeneous. In reality, however, consumers often pay different prices for identical goods. The amount and quality of information available, and many other factors, make the consumer's decisionmaking task in a market economy formidable.<sup>21</sup> The assumptions that are made about how consumers make decisions play an important role in the analysis of consumer policy.

Many problems faced by consumers involve either important degrees of uncertainty or the need to assess risk correctly. There is ample evidence that human beings have a hard time evaluating risk. When making decisions under uncertainty, people systematically depart from what common sense would consider rational behavior. Some well-documented examples of consumer behavior provide additional evidence of "irrational" behavior—even though a formal theory incorporating them is lacking. These phenomena have important implications for consumer policy.

*Information processing by consumers.* Consumers use information only when the benefit from doing so exceeds

the costs, including the time to gather and process information.<sup>22</sup> Policies would be judged as desirable from a social point of view if the reduction in cost or increased benefits to which they lead exceed the costs of implementation and enforcement.<sup>23</sup>

Many consumer policies are designed to reduce some of the following "costs," or barriers that prevent consumers from using information efficiently:

- *Knowledge.* Consumers often do not understand available information about a good or service. For example, laundry detergents often claim to have some sophisticated component (such as biosolves), whose meaning and effect are unknown to most consumers. This problem is sometimes exacerbated by producers who try to differentiate their product by adding attributes that serve no purpose other than product differentiation.
- *Effort.* It may take consumers considerable time to discover where to find information about a particular product. For example, consumers could spend a full day going from one supermarket to the next to compare the cost of the basket of goods that they buy regularly; the time required to do so, however, prevents most consumers from undertaking this task.
- *Environment.* The informational environment faced by consumers is often unfriendly. How information is presented may determine whether consumers use it. For example, unit pricing helps consumers compare prices across products packaged in different sizes or quantities.
- *Irrelevant or biased information.* Available information about a product is often not the information consumers are interested in. Or the information may be presented in a misleading way.

*Assessing risk and making decisions under uncertainty.* Consumers often make decisions in the face of significant uncertainty. The expected utility hypothesis is the central assumption in economics about how individuals make "rational" choices under uncertainty. Consider an individual faced with choosing among alternative actions whose impact on her welfare depends on events unknown to her. According to the expected utility hypothesis, she would consider every possible action she could take and would assign cardinal utility to her welfare for all possible outcomes of the uncertain events.<sup>24</sup> She then would calculate the expected utility of every action by appropriately weighting the utilities she assigned by the corresponding probabilities. Finally, she would choose the action that maximized her expected utility.

The concepts of risk aversion and risk premium fit naturally into the expected utility framework. Most people are prepared to pay money to reduce the level of risk to

which they are exposed. For example, most families prefer a lower but secure income to an uncertain, albeit higher on average, income. Individuals with such preferences are said to be risk-averse, and the income they are prepared to give up (on average) to ensure a steady flow of income is the "risk premium" they pay. People who care only about their average income, and not about how uncertain it is, are said to be risk-neutral. They are not prepared to pay a risk premium to ensure a certain income. A risk-averse person prefers a guaranteed \$100 to equal odds on gaining \$200 or nothing. A risk-neutral person is indifferent between both alternatives, since in each case the average return is \$100. Markets for insurance exist largely because most people are risk-averse.

The expected utility framework raises various issues. First, it is clear that few individuals actually assign cardinal utilities to the possible scenarios and then calculate their expected values. There are two complementary answers to this objection. On the one hand, the expected utility hypothesis can be viewed as a working assumption from which empirically testable implications can be deduced (Laffont 1989). Alternatively, as Savage (1954) showed, if individual choice under uncertainty satisfies certain basic properties (axioms), people act as if they maximized their expected utility.<sup>25</sup>

A second objection to the expected utility hypothesis is that individuals must be able to assess correctly the probabilities of uncertain events to calculate expectations. For policy questions, it is useful to distinguish between cases in which there is a reasonable degree of consensus on these probabilities and those in which lack of information on similar events implies that probability assessments are largely subjective (that is, they may vary substantially from one individual to another).<sup>26</sup> The probability of dying of lung cancer if you smoke a pack of cigarettes a day is rather close to being an objective probability. The probability that the Russian economy will be growing fast by the beginning of the twenty-first century is a subjective probability. When probabilities are objective, individuals may make systematic mistakes in their assessments. For example, most people have a difficult time assessing low probabilities: It is hard to differentiate a risk of 1 in 100,000 from a risk of 1 in 10 million, even though the first is 100 times more likely to occur. If the costs associated with both risks are large, this difficulty may lead to important misallocations of resources in risk reduction.<sup>27</sup>

Even if probabilities are subjective, the mathematical rules for calculating complex events based on probabilities of simpler events impose constraints on how a ratio-

nal individual assigns probabilities. For example, if two events never happen simultaneously, then the probability of either one of the two events taking place must be the sum of their individual probabilities (no matter what probabilities are assigned to the individual events). If consumer behavior indicates that consumers are violating the basic laws of probability in making their decisions, then consumers are acting in an irrational manner.

There is a rich literature showing that people make systematic mistakes when making decisions under uncertainty, that these mistakes are made in simple situations, and that they are made by both laypeople and experts.<sup>28</sup> As described above, these mistakes may arise because (a) people do not act as expected utility maximizers; (b) people assess (objective) probabilities incorrectly; and (c) people make systematic mistakes when applying the laws of probability.

Three of the biases that are documented by this literature and are most relevant for this (and the following) chapter are briefly reviewed here.<sup>29</sup>

- *Prominence or salience.* People may either over- or underestimate the probability of an event occurring depending on the event's characteristics. People generally overestimate the probability of dramatic, dreadful, prominent events (such as airplane crashes) and underestimate the probability of regular, less dramatic events. Breyer (1993, table 4) illustrated this point. He compared how the U.S. public and experts at the Environmental Protection Agency rated the importance of 22 health risks associated with environmental problems. The public's ratings were totally unrelated to the experts' assessments.<sup>30</sup>

"Salience" may lead consumers to weigh available information incorrectly when deciding whether to purchase a good. The following example (Nisbett and Ross 1980 cited in Akerlof 1991) illustrates this point:

Let us suppose that you wish to buy a new car and have decided that on grounds of economy and longevity you want to purchase one of those stalwart, middle-class Swedish cars—either a Volvo or a Saab. As a prudent and sensible buyer, you go to Consumer Reports, which informs you that the consensus of their experts is that the Volvo is mechanically superior, and the consensus of the readership is that the Volvo has the better repair record. Armed with this information, you decide to go and strike a bargain with the Volvo dealer before the week is out. In the interim, however, you go to a cocktail party where you announce your intention to an acquaint-

tance. He reacts with disbelief and alarm; "A Volvo! You've got to be kidding. My brother-in-law had a Volvo. First, the fancy fuel injection computer thing went out. Two-hundred and fifty bucks. Next he started having trouble with the rear end. Had to replace it. Then the transmission and the clutch. Finally sold it in three years for junk (p. 2)."

This anecdote adds only one case experience to those considered by *Consumer Reports*, leaving the mean repair records of the two cars virtually unchanged. Yet most prospective car buyers are likely to give considerably more weight to the case described in the above scenario than is warranted by the information it actually contributes.

- *Rules of thumb.* People often use rules of thumb (heuristics) when making decisions under uncertainty. This approach reduces the time and effort to make a decision and may be justified due to the cost and effort involved in processing information, as long as the biases introduced are small.<sup>31</sup> Yet there is substantial evidence that rules of thumb used in practice are based on principles (such as anchoring, representativeness, and availability of instances) that may lead to large and significant biases.

- *The belief in personal immunity.* There is evidence suggesting that most people view themselves as exposed to less risk than the average person. When it comes to the risk of lung cancer from smoking, for example, many smokers rationalize that "it can't happen to me." Needless to say, this implies that most people systematically underestimate their risk levels. We somehow tend to believe that negative events happen to others, not to us. This misperception helps explain why most people do not use safety belts in the absence of a belt law.<sup>32</sup> It also helps explain why interest rates charged by credit card companies in the United States remained almost unchanged during the second half of the 1980s and the early 1990s, even though interest rates charged by banks decreased dramatically.<sup>33</sup> When choosing a credit card, consumers underestimate the probability that they will have to run high levels of debt on it; by the time debt has accumulated, no other credit card company will lend them money.

*Additional examples of irrational behavior.* This section concludes by considering some additional evidence on consumer "irrationality." These examples are relevant to the discussion of the relative merits of alternative consumer protection policies that follows later in this chapter.

- Pratt, Wise, and Zeckhauser (1979) showed that price dispersion for "almost" identical goods (in the city of Boston) was far larger than could be accounted for by



transaction (search) costs or alternative economic explanations. All products considered were listed in the Yellow Pages, so consumers' lack of access to information was not an issue. A survey conducted by the Chilean Consumer Service (SERNAC) in 1992 obtained similar results. Nearby pharmacies charged prices for identical, relatively expensive drugs that often differed by a factor of three. Although consumers could have "shopped around" for drugs, they apparently did not.

- Day and Brandt (1974) studied the effect of the U.S. Truth-in-Lending Act, which forces retail stores to inform customers of the interest rate implicit in sales that are paid in installments. They concluded that a large fraction of consumers do not change their behavior based on this information and consequently pay a much higher interest rate than necessary.

#### *A classification of consumer goods and services*

The ease with which consumers can assess the attributes of a good provides a useful framework for analysis (see Nelson 1970 and Darby and Karni 1973). Goods can be classified in one of three groups:

- *Search goods.* These are goods whose quality can be ascertained before purchase. Stamps, postcards, and dresses are examples of search goods.
- *Experience goods.* The quality of these goods is learned only after their purchase, through use. A book, canned food, restaurants, and suitcases are examples of experience goods.
- *Credence goods.* Consumers rarely learn the quality of these goods. Fire extinguishers, the resistance of a house to an earthquake, and the timeliness of a doctor's intervention belong to this category.

In the case of search goods, consumers can allocate resources efficiently under reasonable assumptions about their rationality and informational environment; they must merely examine goods carefully before buying them. To what extent does the market mechanism ensure that the quality and variety of search goods are close to what is socially desirable? When firms have market power, there is no such assurance.<sup>34</sup> Both the quality and the variety of goods produced may be above or below their socially desirable levels.<sup>35</sup> Policy redressal would be based on antitrust laws and regulation, topics beyond the scope of this chapter.

In the case of experience goods, sellers often have considerably more information than buyers. The main consumer protection issue is whether adequate information is made available to consumers at a low cost. Deciding whether regulation is necessary requires an

understanding of the incentives that firms and other private agents have to supply information to consumers. This topic plays a central role in the next section on market-based remedies.

Credence goods generally require government intervention. The market test is usually not strong enough to deter producers from opportunistic behavior, since the worst threat a producer faces is often bankruptcy, although the potential damage of such behavior may be considerably larger.<sup>36</sup> Government intervention may take a variety of regulatory remedies.<sup>37</sup>

#### **Market-based remedies**

The main consumer policy issue in the case of experience goods is whether producers have incentives to provide quality products and, if they do, how they convey this fact to consumers. This section considers several market-based remedies that help protect buyers of experience goods.

#### *Guarantees provided by sellers*

Some producers fully compensate consumers if the quality of an experience good differs from that publicized.<sup>38</sup> Producers have incentives to provide full warranties when (a) the quality of the experience good is easy to evaluate, and (b) the good's performance is not affected by the consumer's behavior and can therefore be attributed entirely to the producer. Under these circumstances producers will provide full warranties because consumers will grow suspicious if they do not. Limited warranties are signals of low quality in this case.

The performance of most goods depends on how buyers use them. For this reason, most goods have only a limited warranty or no warranty at all. Providing a full warranty for such goods would lead to a moral hazard problem: Since buyers have no incentives to internalize the cost of using the product carelessly, they will be more careless than they would otherwise be. Furthermore, firms offering full warranties would attract "high-risk" consumers, thus also leading to an adverse selection problem. By requiring consumers to share part of the costs of performance that is below the promised level, producers induce consumers to behave more carefully.<sup>39</sup>

Government regulation that forces producers to provide full (or partial) warranties for experience goods may do more harm than good by leading to moral hazard and adverse selection problems.<sup>40</sup> Yet governments may foster consumers' interests by measures that reduce their information processing costs in evaluating warranties. For example, government regulations could specify a mini-

mum standard that manufacturers must meet to use the term "full warranty"; warranties that fell short of these requirements would have to state that they were limited.<sup>41</sup>

One could argue that such a law might reduce the total provision of warranties by producers, who might not want to signal that they were not prepared to stand fully behind their products. However, in the United States the duration, scope, and remedies in warranties improved after passage of the Magnuson-Moss Warranty Act of 1975.<sup>42</sup> One possible explanation is that manufacturers benefit from standardization, since it reduces the cost of signaling to consumers that the producer believes the good it manufactures is of high quality.

The potential benefit that may accrue to consumers from standardization is illustrated by a proposal that Chilean authorities are considering for car sales. It would require sellers to list in a standard format the duration and kind of warranty that applies to various car parts are under—a simple measure that would make it easier for consumers to compare different cars.

Warranties may also serve as quality guarantees and assurances, rather than insurance policies. The trend in retailing in industrial countries is for retailers to take back products and offer customers a refund, with no questions asked. Some products even have a double-the-money-back guarantee if the buyer is at all dissatisfied. Such practices can be viewed as extensions of the principle, "the customer is always right."

Two issues related to warranties are particularly relevant in many developing countries. First, warranties are useless in informal markets, where sellers cannot be held accountable for defective goods. This explains why search goods are considerably more likely than experience goods to be sold in informal markets. It also explains why informal sellers find ways of turning experience goods into search goods. For example, potential buyers of watermelon in informal markets in developing countries often are allowed to taste a thin slice.<sup>43</sup> In this way street vendors assure consumers of the quality of their produce and, for all practical purposes, watermelons become search goods.

One could argue that, in the case of experience goods sold in informal markets, manufacturers could provide warranties directly, thereby solving the problem. Yet precisely because of the reputation of brand names, informal retailers often forge brand name labels, which forces manufacturers to guarantee only goods bought at formal outlets.<sup>44</sup>

A second issue, especially in countries where illiteracy rates are high, is that consumers may have difficulty understanding warranties. This provides an additional

argument in favor of a simple standardization, such as that described above, for the term "full warranty." Both examples point to the importance of consumer education, a topic considered in chapter 7.

#### *Information provided by sellers*

Warranties for experience goods may offer little protection for consumers when enforcement costs are high relative to the value of the good. Such costs may be high if, for example, the legal system is ineffective or if it is difficult to assess whether the good met the promised performance standards. In the second case, adequate compensation may pose a problem. In the absence of warranties, the issue is whether manufacturers have incentives to provide adequate information about product characteristics and prices to consumers.

*Information about quality: signals, bonds, and reputation.* Information about quality is communicated very differently for one-time versus repeat purchases. When the buyer and seller interact only once and the seller cannot be sued for faulty quality (or transactions costs are prohibitively high), market demand is unable to discriminate among different qualities offered. The producer therefore has no reason not to provide the lowest possible quality.

Producers of high-quality goods may invest in reputation to signal consumers that their products are high caliber. The rationale behind such expenditures is that the producer, knowing that the product is of high quality, is prepared to sustain initial losses. Were the product of poor quality, consumers would eventually discover the truth, and the producer would never recover the initial expenditure. The advertising campaign may convey the producer's desired message even if it gives no real information about the product. The fact that the advertising is launched shows that the product is worth promoting, because advertising is not advantageous for low-quality experience goods.

Posting a bond that guarantees the performance of a good or service is another way a producer can build reputation and signal the quality of its product to consumers. The producer forfeits the bond if the service is defective. For example, contractors often must post a bond stipulating that a project will be completed by an agreed date and in an agreed manner.

Although bonds often give adequate incentives for sellers to provide quality products, they present a number of limitations, some particularly relevant in developing countries. First, sellers may not have the financial resources to post a bond.<sup>45</sup> Second, in the case of experience goods, the price of a bond that provides adequate

incentives for the producer is inversely proportional to the probability that consumers will detect product defects; thus large sums are required when the probability of detecting a defective good is small. Third, the transactions costs involved in determining whether the good was provided as agreed may be high, especially if the legal system is not efficient.

In the absence of warranties and bonds, high-quality goods are likely to be produced in the case of repeat purchases. When purchases are made fairly frequently and customers can quickly learn the quality of the good, manufacturers have incentives to continue producing high-quality products. By so doing they build a positive reputation among consumers and eventually may charge a "quality premium." Fear of lost sales and consumer complaints deters manufacturers from lowering quality.

To illustrate the difference between one-time and repeat purchases, consider the case of life insurance. *The Economist* concluded its gloomy appraisal of the British life insurance industry as follows: "The industry remains riddled with bad practice, and will continue to be as long as most sales take place after brief encounters between ill-informed customers and unfamiliar salesmen chasing hefty commissions."<sup>46</sup> The solution offered by the British magazine was bancassurance. Customers buy this insurance from a bank that has formed an association with an insurance company. The insurance shifts to the insurance company the incentives provided by the long relationship between the customer and the bank, thereby solving the moral hazard problem.

In Chile every worker must save 10 percent of his or her earnings in a savings account that is managed by a private pension fund. On retirement, workers can choose between a sequence of phased withdrawals and an annuity. The resulting annuities market presents problems similar to those of the British life insurance market. In the case of annuities, transactions take place once in a lifetime, commissions are hefty, and advertising expenditures large.<sup>47</sup> Moreover, retirees are charged a much higher price than that for similar assets sold under repeat-purchase conditions (Bitrán 1994). There also is a wide variety of annuities, which consumers have difficulty comprehending.

Bancassurance is not a viable solution in Chile because a large fraction of the population does not have a bank account. The Chilean Congress is considering whether to standardize the annuities market in order to make it easier for customers to make comparisons (Bitrán 1994).<sup>48</sup> The risks of the various annuity providers would be rated, and retirees would choose at least three firms to bid for their annuity. The bidding process would automatically

include all annuity providers whose ratings are equal to or greater than the average rating of those chosen by the customer. Annuity sellers thus would have an incentive to follow a strategy of high capitalization and low prices, without incurring large advertising expenditures. Entry barriers would also be dramatically lowered in this system. Once bids were in, the buyer would be free to choose either the best offer among all bids (within a 1 percent range) or the best offer among those annuity providers selected initially.

Although this discussion has emphasized the distinction between one-time and repeat purchases, it is not strictly necessary for consumers to purchase a product frequently for reputation to take on importance. Consumers often have access to some information before buying a good. They may ask friends and relatives who have bought the good, they may rely on the advice of a vendor whom they trust, they may trust certain brand names, they may read product-testing magazines, or they may perform some simple tests. In any of these cases, the quality of experience goods increases with the number of informed consumers.<sup>49</sup> Furthermore, as long as some customers are informed, high prices may signal high quality to uninformed customers.

*Information about price: sales, bargains, and rip-offs.* There is widespread evidence that consumers pay substantially different prices for similar (even identical) goods and that price dispersion is growing over time. In the United States the dollar value of markdowns on all merchandise sold in department stores as a percentage of dollar sales increased from 8.9 percent in 1975 to 16.1 percent in 1984 (Pashigian 1988).<sup>50</sup>

To determine whether price dispersion (spatial or temporal) justifies a specific consumer policy response, it is necessary to understand why people pay different prices for similar goods. Much price dispersion is probably the result of second-degree price discrimination. Since customers' reservation prices are not known to sellers, and sellers are often unable to charge different prices to different groups of customers (due to informational and legal constraints), sellers may charge a high price initially (so as to capture customers prepared to pay more), then lower the price, and eventually put the good on sale.<sup>51</sup> Since most customers prefer to consume a good sooner than later, some will buy at the higher price. Alternatively, random sales benefit most of those customers who spend time looking for bargains; these customers are usually those with lower reservation prices.

Price dispersion may also be related to positive search costs. Information about prices at all stores selling a par-

ticular good is usually not available. Consumers must spend time (and other resources) to gain this information. A market equilibrium with price dispersion may emerge if consumers' costs of obtaining information differ substantially (Salop and Stiglitz 1977). Although those selling at low prices will have incentives to provide price information to consumers up to the point where the marginal expected benefit from so doing is equal to the corresponding marginal cost, from the point of view of consumer protection, the issue is whether this leads to sufficient price information. In fact, the amount of information is often inadequate. At the same time, there is an externality associated with acquiring information.<sup>52</sup>

The problem often faced by consumers with regard to price dispersion is ensuring that once a cheap outlet has been found, the good has the announced quality. When the price of a good is much lower than a consumer would normally expect to pay, there is a high probability that the product is defective.<sup>53</sup> Even though legislation usually requires that information on substandard articles be provided, it may be difficult to enforce such laws (for example, for goods sold at going-out-of-business sales). Consumers are generally suspicious of sales in which goods are sold at exceedingly low prices (see Leff 1976). For that reason some sellers try to convince buyers that there is a valid reason for the sale—which is why fire sales, going-out-of-business sales, and the like attract more customers than an announcement that a group of substandard products has just arrived.

#### *Information provided by third parties*

Even if sellers and buyers interact repeatedly, buyers often have good reason for not trusting the information sellers provide. When an assessment of the quality of a good involves substantial subjective judgment, it may be to the advantage of both sellers and buyers if third parties provide the information.<sup>54</sup>

Consider, for example, the case of investors wishing to assess the quality of a security. Most investors face a formidable task if forced to assess the probability of default on a bond. They are therefore willing to pay for a reliable assessment of the bond's likely performance. Many investors rely on the ratings of private firms, such as Moody's and Standard and Poor's.<sup>55</sup>

Another example of third-party information is quality certification systems, such as the ISO-9000 series.<sup>56</sup> ISO certificates provide easy checks on the quality of suppliers of intermediate goods, thereby helping manufacturers select suppliers (especially foreign suppliers.).<sup>57</sup> In industrializing countries, manufacturers in the export sector

were the first firms to demand ISO certification. A manufacturer that obtains ISO certification often demands that its local suppliers do the same. The number of manufacturers with ISO certification in developing countries is likely to grow dramatically in coming years.

Because many products have a complicated construction, making it difficult for consumers to evaluate their safety, a market has been created for private providers of safety seals, such as the Underwriters Laboratories (UL) seal in the United States and the Safety Goods (SG) seal in Japan.<sup>58</sup> Such institutions sometimes receive government funding; the German Institute for Industrial Standards (DIN), which issues the "DIN-tested" seal, is one example.<sup>59</sup>

A major difference between quality control certification (such as ISO) and safety seals (such as UL, SG, and DIN) is that only in the second case does the certifier bear responsibility for injuries that may occur.<sup>60</sup> Whether such seals will become more important in developing countries is an open question. Early experiences have not been very successful. For example, poorly funded government organizations in India were unable to prevent forgery of both local and foreign seals.<sup>61</sup> Private safety seal providers (both local and foreign) will no doubt emerge in developing countries once their legal systems can handle effectively the liability issues involved.

Whether private institutions have incentives to provide information depends on the extent to which they can derive the full benefits of this information. In the case of safety seals, firms pay for certification directly, thereby avoiding any free-rider problem. In the case of consumer information magazines, however, buyers may benefit from these magazines without paying for them, either by reading them in a library or by borrowing them from a subscriber.<sup>62</sup> Thus consumer magazines will provide less product information than is socially desirable.

Product-testing organizations are an important feature of consumer protection in industrial countries. The magazines these organizations publish provide consumers with useful information on product features and quality. Some of these private organizations are making special efforts to foster consumer protection in developing countries. For example, the International Organization of Consumer Unions (IOCU), which has offices in Chile, London, Malaysia, and Zimbabwe, has promoted the growth of product-testing organizations in developing countries. Clearly, there are important economies of scale in sharing testing methods and results across countries. This raises the issue of how transnational consumer organizations (such as the IOCU), which generate external benefits

beyond the border of any particular country, should be funded. Multilateral organizations may have an important role to play in preventing countries from free-riding.

An important issue related to the private provision of information is the incentives that providers have to be truthful. The concepts developed earlier in this section also apply to private information providers; they sell a good that could be considered an experience good (and often a credence good).<sup>63</sup> Private providers of information must invest in building a reputation, which takes time and resources. This is relevant, for example, for new consumer magazines. A careful choice of private testing institutions and cooperation with institutions that have gained international prestige may help new consumer magazines build a reputation among both consumers and producers.

It is easy to make the case for subsidizing private organizations that provide information to consumers.<sup>64</sup> Argentina's consumer protection legislation passed in October 1993, for example, provides state subsidies for private consumer organizations.<sup>65</sup> Such funding should depend on the interest that consumers demonstrate in the information provided by such an institution. Thus the government funding received by a consumer magazine should increase with its circulation.<sup>66</sup>

Subsidies for organizations that provide information to consumers help the organizations internalize the benefits they provide. By increasing the number of informed consumers, subsidies also benefit uninformed consumers (a positive externality), since informed consumers induce (or allow) firms with market power to produce high-quality goods. Thorelli, Becker, and Engledow (1975) referred to informed consumers as "information seekers." They noted that "they, rather than the average consumer, are keeping producers on their toes. They, more than others, fight the battle for better products, for honesty and decency in business practice, and for more truthful and informative advertising."

### **Regulatory remedies for consumer protection**

Governments are not benevolent social planners striving to maximize society's welfare.<sup>67</sup> Government policies may lead to corruption, rent seeking, and waste. They also may create groups of powerful and privileged bureaucrats. Regulatory remedies for consumer protection must take these limitations into account.

#### *Protection of health and safety*

Some producers sell products that put consumers at unreasonable risk. In some cases, producers fail to take adequate steps to prevent potential hazards. The Chevrolet Corvair

case, which catapulted Ralph Nader to the leadership of the U.S. consumer movement in the mid-1960s, and the thalidomide cases in Europe are well-known examples of manufacturer negligence. Frequent food poisoning episodes in developing countries (and sometimes in industrial countries, such as the Kanemi rice oil and the Morinaga powdered milk cases in Japan) are additional examples.

As noted earlier, there is no such thing as a totally safe product. Most products can cause physical, economic, or psychological harm. From the point of view of consumer protection, the relevant question is not whether products are safe, but whether market forces provide incentives for producers to ensure "efficient" levels of safety in consumer products. Markets do not provide efficient safety levels when there is a serious source of market failure (usually rooted in some significant transaction cost). Examples are hazards that are imposed on others (negative externalities), such as environmental risks, and product risks unknown to the consumers who bear them (due to asymmetric information). Another reason government action may be justified is consumers' misperceptions of low-probability events.<sup>68</sup>

In the absence of voluntary actions by producers, there are two approaches for protecting consumers' health and safety when markets fail to do so efficiently: liability law and regulation. Liability law and government regulation are different both in their design and in the way they promote consumer safety. Liability law compensates those injured, whereas government regulation is best designed to provide incentives for appropriate prevention. Regulatory requirements are superior to liability law when producers are unable to pay fully for the harm they cause (Shavell 1984). This situation is more pervasive in developing countries, where local producers often are not accountable (such as those selling in informal markets) or would go bankrupt if sued successfully when transactions costs are so high that producers are seldom sued, regulation is more effective than liability law (Shavell 1984). Conversely, when the authority's information on risk is poor, liability law can be expected to work better than government regulation.<sup>69</sup>

This section argues that, even though developing countries would benefit from reducing the transactions costs involved in using liability law to promote consumers' interests, they should learn from the mistakes of some industrial economies and avoid excessive reliance on liability law. A well-designed regulation or appropriate incentives for private provision of safety often can be considerably more successful than liability law as well as much less costly and more efficient.<sup>70</sup>

*Liability law.* It is impossible to write contracts that consider all possible contingencies, given the transactions costs that would be incurred. It is economically more efficient to settle the costs associated with risks with a low probability of occurrence only after adverse events actually take place.

In many developing countries, consumers are still the main bearers of risk (*caveat emptor*), yet as consumer protection develops, these risks are borne increasingly by producers (*caveat vendor*). For example, the consumer protection law approved in Brazil in 1990 places the burden of proof on producers (or importers).<sup>71</sup>

Consideration of transactions costs (such as legal fees and liability insurance) for consumers and producers is important in evaluating the efficiency of a consumer protection system based on liability law.<sup>72</sup> Data from countries that rely heavily on liability law to encourage product safety indicate that these costs can be astronomical. For example, liability costs account for 17 percent of the fares paid by passengers on the Philadelphia mass transit system and approximately 20 percent of the retail price of a ladder in the United States (Viscusi 1991a, p. 8). Net compensation to U.S. victims constitutes only about half of the total expenditures for tort litigation.

In most countries, liability is imposed according to two basic standards: strict liability and negligence rule. Under strict liability, producers are responsible for the damage their products cause regardless of how much care they took in product design and manufacture; the new law in Brazil belongs to this class. Such a liability law forces producers (or importers) to internalize all safety costs and may lead to an inefficient outcome when consumer behavior plays an important role in product-related accidents. The moral hazard problem under strict liability is serious and may cause producers to spend too many resources to provide safe products.

Negligence rule imposes some reasonable level of care on producers and requires defining the standards that correspond to "reasonable care." Producers are held to standards regarding product design and manufacture as well as warnings that their products carry.

Breyer (1993) summarized most experts' current thinking on the U. S. liability system:

[The tort system] leaves the determination of "too much risk" in the hands of tens of thousands of different juries who are forced to answer the question not in terms of a statistical life, but in reference to a very real victim, needing compensation in the courtroom before them. The result is a system much

criticized for its random, lottery-like results and its high "transactions costs" (i.e., legal fees) which eat up a large fraction of compensation awards (p. 59).

Viscusi (1991a) illustrated the excesses of the U.S. liability system with some vivid examples. In one case a physician who fell off his horse at a country club and fractured his right arm, sued the club and was awarded \$6.3 million in damages in an out-of-court settlement. In another case a Philadelphia psychic who claimed she had lost her psychic powers after undergoing a scanner exam was awarded \$1 million.

In developing countries whereas consumers' access to redress from private providers of goods and services is often limited and expensive, obtaining redress from public utilities, municipalities, and other government agencies is usually impossible. Describing the situation in India in the early 1980s, Galanter (1985) noted that "disasters large and small in India typically have no legal consequences." Redress from government can be expected to develop in parallel with civil servants' accountability. Major legal (and sometimes even constitutional) reforms are needed in many developing countries. India's 1986 Consumer Protection Act gives consumers access to redress when government goods and services are involved.

Protecting consumers from medical malpractice poses a major challenge for those designing consumer protection policies in developing countries. The asymmetry of information in this case is extreme: Patients have almost no way of assessing to what an extent a negative outcome is due to physician negligence. A difficult agency problem thus exists. Resolving such issues requires assessments provided by other physicians, a task that is often impracticable.

Protecting consumers from negligent physicians can be an expensive task, as the medical malpractice situation in the United States illustrates. When physicians fear the threat of medical malpractice charges, they tend to order more tests than they might otherwise (defensive medicine). Consumers have few incentives to resist such tests since they do not bear medical costs at the margin because medical bills are covered by either government-financed public health services or private insurers. The high cost of health care in the United States can be partly attributed to the medical malpractice liability system.

Successful medical malpractice cases are rare in most developing countries. For example, in Chile it took a case involving a supreme court judge for the legal system to award more than token punitive damages. The judge had

a hip problem, and the physician charged with negligence had performed surgery on the wrong hip. This case also offers an illustration of how the medical profession can close ranks behind a threatened colleague.<sup>73</sup>

Most industrializing countries would benefit from the positive incentive effect on product and service safety that would result from significant expansion of liability. Yet beyond a certain threshold, the liability system stops acting as a deterrent and ends up increasing the prices of goods and services with no positive offsetting effect.<sup>74</sup>

*Regulation and consumer safety.* Protecting consumer safety through the liability system is costly, since it requires use of the normally expensive legal apparatus. Direct regulation may be a more effective, less costly way to deter accidents. The effectiveness of government regulation is limited, however, because practical constraints preclude focusing regulatory attention on more than a small percentage of products. This contrasts with liability law which, at least in principle, is all inclusive.

Government regulation may be quite powerful in some markets. It can take the form of quality control, minimum quality standards, obligatory disclosure, occupational licensing and certification (as for doctors and lawyers), safety regulations, recalls, and bans. Government regulations focus on prevention rather than compensation for victims, as does the liability apparatus. Although regulation does provide incentives for producers (such as through fines), there is no direct link between these incentives and reparations to those injured.

Regulators try to limit or reduce exposure to certain potentially risky substances, products, and even people (for example, unqualified doctors). There are some products whose potential risk is considerably larger than their benefits, justifying a ban on their production.<sup>75</sup> The regulatory system should seek to foster choices that informed consumers would make for themselves in a well-functioning market.<sup>76</sup> The regulatory process should be based on risk-benefit analysis.<sup>77</sup>

Government standards and regulations can be classified as routine and nonroutine. The case of routine product safety regulations is straightforward: manufacturers of products in certain categories must follow standard procedures to obtain government certification before the products are sold to the public. In the nonroutine case, once a new risk makes it to the public policymaking agenda, a risk assessment must be performed to determine the extent of the risk.<sup>78</sup> Risk management then involves answering a number of questions. Should the product be banned, regulated, or modified? Should perceptions and valuations be altered through education and

public relations? How much should be spent? Who should pay?

Risk management can benefit from the expertise of civil servants who specialize in safety regulations and work together with experts from a variety of fields on a regular basis. In the case of developing countries, free-riding on the expertise of industrial economies may lower costs substantially. It is in this spirit that the Russian government recently announced that it would rely on foreign certifications to decide which drugs are sold in Russia.<sup>79</sup>

Despite the fact that many products are subject to extensive regulation prior to marketing, important safety hazards sometimes become apparent only after a product is on the market. In the United States when a product is found to be defective or to pose an unreasonable hazard to health or safety, the manufacturer is required to remove the product from the market. This recall can be initiated by either the manufacturer or a regulatory agency; it can involve the removal of a few bottles of contaminated or mislabeled product or the permanent removal of a product from the marketplace.<sup>80</sup> Recalls can be initiated for products that pose any one of three health hazards.<sup>81</sup> Of the approximately 3,000 citations by the Food and Drug Administration during 1973-78, 2 percent were products with defects that could have seriously adverse health consequences, including death (Jarrell and Peltzman 1984). The other types of health hazards that can prompt recalls are temporary or medically reversible health hazards and hazards unlikely to entail adverse health consequences.

Product safety regulations may sometimes do more harm than good (see Viscusi 1985). Viscusi (1984a, 1984b) considered the case of child-resistant bottle caps for certain drugs. He argued convincingly that when safety designs are too complicated, parents often leave bottles uncapped, thus facilitating children's access to drugs. This fact, combined with the lulling effect that safety aids have on many consumers, explains why the percentage of aspirin poisonings attributed to child-proof caps increased from 40 percent in 1972 to 73 percent in 1978.<sup>82</sup> It should be noted, though, that such concerns are more relevant in industrial economies, where safety regulations are considerably more developed and therefore more likely to address problems whose solutions would have small expected net benefits.

#### *Protection of economic interests*

Many government policies are designed to protect consumers' economic interests in the marketplace by facilitating the process through which consumers acquire and

process information. Such policies include requirements regarding the information that sellers provide to potential buyers through advertising or labeling of products. They also include regulations on contracts between buyers and sellers.

*Advertising and promotional practices.* Economists disagree about the purpose and benefits of advertising.<sup>83</sup> Is advertising designed to systematically fool consumers, calling into question the central tenet of consumer sovereignty? Or, by offering consumers a low-cost way to obtain information, does advertising promote competition and help consumers achieve higher levels of welfare?

The adverse view of advertising is not new (see Kaldor 1950, Nichols 1951, and Galbraith 1958). This view claims that advertising persuades and fools consumers by allowing firms to create artificial product differentiation and increasing barriers to entry (Galbraith 1967 and Solow 1967). When firms compete through advertising rather than prices, advertising is wasteful from a social point of view. The example most often cited by proponents of this view is television advertising, which provides little information beyond the availability of the advertised products. Solow (1977) summarized this position:

Sometimes it comes over me that the TV advertiser does not really care what the ad says. In fact what the commercial actually says is almost always utterly irrelevant or completely inane. It cannot be that the advertiser expects anyone to believe a word of it, that Exxon is in business to make the grass grow, that my Sunoco dealer is all that friendly, that I can actually trust my car to the man who wears a star. It is probably much simpler: when I run out of toothpaste I'm going to buy something. What word will come out of my mouth when I walk up to the counter? God knows; but if I have seen Crest more often than Colgate in prime time this past month, I have a sneaking feeling that the odds are I'm going to buy some Crest (p. 269).

Many European countries have enacted policies consistent with the adverse view of advertising (see Mayer 1989). For example, Denmark has banned television advertising, whereas Norway prohibits the advertising of alcohol and tobacco products as well as advertising that portrays women as sex objects. Almost all European countries restrict television advertising to certain times of the day and require that it be shown in time blocks, thereby making it easier for consumers to avoid commercial messages if they wish. This is in stark contrast to the

practice in Latin America and the United States, where advertising is an integral part of popular TV shows, making it harder for viewers to escape its message.<sup>84</sup>

The negative view of advertising motivates laws against false and deceptive advertising. Many industrializing countries, such as Argentina and Brazil, that have introduced major changes to their consumer protection legislation have included such a law. Yet, to be effective, the transactions costs incurred by consumers who invoke it should be small. The burden of proof, for example, must not be on the consumer's side, as in some developing countries where consumers must show that sellers have deliberately misled them. The regulatory methods used to implement such laws are advertising substantiation rules, mandatory disclosure (such as health warnings on cigarette ads), and provisions for corrective advertising in the case of deceptive ads.

The consumer protection law passed in Mexico in 1975 requires advertisements of sales to indicate how long the special prices will be in effect; otherwise, it is understood that the advertised prices are valid until announced through the same media as originally publicized (see Vargas 1989). Unfortunately, sellers (not only in Mexico but also in industrial countries) have found a way around these laws. Their ads announce that a sale will last "while stock is available." This is a problem for buyers who, after spending time and resources to travel to the store, discover the merchandise is sold out.

Some countries, such as Chile and Germany, rely on private industry-supported advertising councils. These councils often have the right incentives, since false advertising can affect the image of an entire industry. Yet they usually lack both the resources and a mandate to enforce their decisions adequately. For example, when the council concludes that one of its members has run a deceptive ad, the member can choose to terminate its membership in the council, thereby limiting punishment to the loss of reputation that may result from publicity about its actions. If the issue at stake is rather technical, as was the case recently in Chile with a long-distance telephone carrier, the indirect cost paid by the firm running the deceptive ads may be small.

The view that advertising brings useful information to consumers dates to Telser (1964). This view holds that advertising promotes the production of high-quality goods, since it makes it easier for manufacturers of such goods to inform consumers about their products.

Based on the "natural experiment" provided by the 50 states of the United States, proponents of this view have shown that products such as eyeglasses and prescription



drugs are more expensive in states that forbid advertising of these products (see Benham 1972 and Cady 1976). Proponents argue that advertising of search goods fosters competition by reducing the cost of learning about competing products, thereby increasing the elasticity of demand.

Because consumers must try experience goods, they view a good they have tried differently than one they have not tried, even if the two are identical. This provides incentives for firms to advertise new products, in the hope of creating a group of captive buyers. The need to promote pioneering brands and consumer reluctance to switch brands are well-documented reasons that firms advertise experience goods (see Bain 1956 and Schmalensee 1982).

A policy of allowing comparative advertising is consistent with the positive view of advertising. Comparative ads make specific comparisons between the product being advertised and its competitors. Comparative advertising is rare outside the United States; a well-functioning liability apparatus (for example, a false advertising law) is required for comparative advertising to work, since a deterrent against false claims by one manufacturer regarding the product of another is needed.

Allowing advertising by professionals, such as doctors and lawyers, is another policy consistent with a positive view of advertising. Such ads are banned in most countries on the ground that they are "unethical" and degrade the image of the profession involved. Studies for the United States have shown that consumers in states that ban advertising for lawyers' and physicians' services pay more on average for these services and have a larger dispersion in the fees they pay.<sup>85</sup>

Consumer protection policies regarding advertising may either limit ads (when the negative view is taken) or facilitate ads (when the positive view is held). The United States is the country that has relied most on measures promoting ads. It is therefore not surprising that U.S. expenditures on advertising—which in 1984 represented between 2 and 3 percent of gross domestic product—are considerably larger on a per capita basis than those of European countries, which often rely on policies limiting advertising. Per capita advertising expenditures in the United States are twice those in Canada, four times those in the United Kingdom, and six times those in France (see *World Advertising Expenditures* 1986).

Both views of advertising undoubtedly have some merit. The relevance of each depends on the product, the nature of the consumer target market (for example, highly educated versus uneducated), and the advertising medium.

Furthermore, a full understanding of advertising requires the inclusion of views from other disciplines, such as social psychology.<sup>86</sup> Thus, for example, one possible answer to Solow's (1977) question about why TV ads convey so little information has to do with consumers' attempts to reduce or resolve cognitive dissonance, or psychological inconsistencies.<sup>87</sup> As explained by Akerlof and Dickens (1982):

As the advertising practitioners point out, people do have needs and tastes, and they do buy goods to satisfy them. Some of these needs and tastes are quite obscure or subtle; it may be hard to tell when the needs are being met. In such cases people may want to believe that what they have just bought meets their needs. Advertising gives people some external justification for believing just that. People like to feel that they are attractive, socially adept and intelligent. It makes them feel good to hold such beliefs about themselves. Ads facilitate such beliefs—if the person buys the advertised product (p. 307).

If this view is relevant, then one of the basic tenets of economics, namely, that agents wish to be better informed, is called into question.

What recommendations should be made beyond the advice that countries enact laws against false and deceptive advertising that involve low transactions costs for consumers? Should a developing country foster policies that expand or inhibit advertising? The answer will depend on the information conditions of the market, the degree of product standardization, the advertising medium, and the country's social and cultural norms.

*Packaging and labeling.* An alternative to direct regulation of products (such as banning dangerous products and imposing design standards) is to regulate the information that sellers must provide through labeling and packaging. Requirements typically address one or more of the following types of information: (1) identification (for example, the country in which the good was manufactured), (2) ingredients (for example, sodium content of food), (3) duration of product effectiveness (for example, expiration date of a drug), (4) comparative performance (for example, energy consumption of a particular refrigerator compared with other brands), (5) information facilitating price comparisons (for example, unit pricing and effective interest rates), (6) conditions under which a good is sold (for example, parts that are under warranty), (7) proper use or care and handling (for example, instructions for washing clothes), and (8) warnings (for example, health risks associated with smoking).

Regulating packaging and labeling information is attractive because, in contrast with direct regulation, consumer choice is enhanced. The idea behind this approach is to help consumers make well-informed decisions. Since what is dangerous for one consumer may be safe for another, this approach allows consumers more choice than does direct regulation.<sup>88</sup> Another advantage of information regulation, compared with direct regulation, is that it is inexpensive (since labels are not costly).<sup>89</sup> A third advantage is that, at least in principle, labeling regulations can be required for all products, in contrast to direct regulation, which is necessarily limited to a small fraction of goods.

Despite these attractive arguments, however, the evidence from industrial countries shows that regulating information provision through labeling is not an effective way of protecting consumers. The problems that industrial countries have encountered suggest that labeling will be even less effective in developing countries. However, this conclusion does not imply that information regulation is useless. Since direct regulation is necessarily limited to a small fraction of hazards, information regulation may be useful for many risks that are not regulated directly. Since information regulation is relatively inexpensive, it may be justified on a cost-benefit basis, even if the expected benefits are small. One example is including a listing of the recommended daily allowances of nutrients on food packages.

To use labeling effectively, consumers must read labels, understand the information, and act on it. There is ample evidence that things go wrong at each of these three stages (see Hadden 1991). First, people often do not read labels, among other reasons because they trust goods that are familiar to them.<sup>90</sup> Periodically changing the information or warning has been found to have some success in cases where consumers stop paying attention to a label because of familiarity. This is why many countries require cigarette manufacturers to alternate among several warning labels.

Second, the information contained in many labels is often quite technical and consequently difficult for most consumers to grasp. This problem is particularly relevant in developing countries, where there are both high functional illiteracy rates and language barriers.<sup>91</sup> Using standardized pictograms to convey information on hazardous products offers a partial solution. For example, Canada adopted a uniform system of pictograms that is taught in school; this system enables almost everyone in that bilingual nation to recognize certain hazards immediately. Label standardization reduces transactions costs for both buyers (information processing) and sellers (deciding what to put on labels). There also is an important positive

externality associated with standardization, which grows with the number of sellers that adopt the standard. Standardization is of limited use, however, since the complexity of many risks makes it impossible to simplify a label without omitting information that some consumers would view as important.

Once consumers have read and understood the information provided on product labels and packaging, they must act on it. Acting rationally in risk situations requires consumers to assess correctly probabilities that are quite small. As noted earlier, biases such as prominence and the belief in personal immunity may prevent individuals from acting on such information. In this case, banning the product or establishing product standards offers more effective protection than does information regulation.

Another limitation of consumer protection through information regulation is that it is highly regressive, an effect that is particularly relevant in most developing countries. Understanding information and then acting on it requires skills that relate to a consumer's level of education, which itself is usually strongly correlated with income. Thus high-income consumers benefit the most from information regulation.<sup>92</sup>

A policy that gives a major role to information regulation to protect consumers in developing countries is not likely to be successful. Yet this is not to say that information regulation should be disregarded. Consider, for example, the significant reduction in information processing time and effort that results from simple requirements such as unit pricing and effective interest rates.<sup>93</sup> The cost of providing this information is so low that, even if only a fraction of consumers benefit from it,<sup>94</sup> the benefits definitely outweigh the costs.

*Unfair contract clauses.* The high transactions costs involved in writing contracts explains why many goods and services are sold with adhesion contracts, which buyers can choose to accept or reject. Adhesion contracts frequently include clauses (sometimes in small print) that are unfair to buyers. If it were costless for consumers to understand the terms of an adhesion contract, regulating these contracts would not be necessary. However, consumers often either do not read or do not understand the terms of a contract. This problem is particularly relevant when sellers can put (psychological) pressure on buyers, as is true for example, for door-to-door sales. One might argue that, in the absence of regulation, consumers would eventually learn from their mistakes. However, this view ignores that this learning process entails high costs for consumers and that sellers may find new and creative clauses that are unfair to consumers.

Regulating some basic aspects of adhesion contracts is justifiable, as is enacting laws that prevent unfair sales practices. The United States was the first country to impose a cooling-off period for door-to-door sales (or, more generally, for sales that do not take place at the seller's usual place of business). Since the U.S. law was enacted in 1972, most European countries and some developing countries (for example, Mexico in 1975 and Brazil in 1990) have followed suit. These laws specify that door-to-door sales must be formalized by a written contract that is binding only a specified number of working days after it is signed or the good is delivered. The cooling-off period is usually five to seven working days, during which time the consumer may rescind the contract with no liability.

A law that provides a cooling-off period for door-to-door sales helps protect consumers from abusive contract clauses at a very low cost. However, for such a law to be effective, door-to-door salespeople must work for an organization that has a formal address, and buyers must remember to ask for the written contract and be able to verify (quickly, by phone) the authenticity of the business address on the contract. Even though desirable, such laws may be expected to be less effective in developing countries with large informal sectors and significant functional illiteracy rates.

Fair credit laws can also protect consumers from abusive practices. These laws aim at making sure that consumers know the true cost of buying on credit, which includes indirect costs such as invoicing and operating charges. The effective interest rate, which summarizes all direct and indirect costs, makes it easier for consumers to compare different credit alternatives and to compare these alternatives with buying with cash.<sup>95</sup>

A fair credit law is desirable in any country. But such a law has limits: It aims mainly at reducing (substantially) consumers' time and effort to compute and compare alternative paying schemes, *not* at imposing ceilings on interest rates or limiting the free market for credit in any other way. An example of a law that went too far is the Mexican Federal Consumer Protection Act of 1975. This law gives the secretariat of commerce the authority to establish maximum rates of interest as well as to ensure that additional charges and interest are not incorporated into the prices of goods and services (see Vargas 1989).<sup>96</sup>

An example of laws that are aimed at unfair sales practices and that have not been very successful are so-called lemon laws (see Nicks 1986). Connecticut enacted the first lemon law in 1980 to help consumers who purchased new cars with serious defects that could not be readily

repaired. By the end of 1986, 40 other states had enacted such a law. Smithson and Thomas (1988) showed that the value consumers give to such laws is relatively small (as low as \$2 for compact cars), since well-established and inexpensive consumer arbitration mechanisms can be just as effective. Because such mechanisms generally do not exist in developing countries, the value of lemon laws would be higher in these countries.

### Major open research topics

Consumer protection benefits from many disciplines in economics and other fields. New developments in microeconomic theory, industrial organization, law and economics, policy analysis, international trade, institutional design, marketing, and psychology often lead to more effective consumer protection policies. This section considers the open research topics in consumer policy.

#### *Expanding the conceptual framework*

What assumptions should be made about consumer behavior when analyzing consumer policy? There is a constant tension throughout this chapter between considering consumers as rational people facing positive transactions costs and assigning an important role to consumers' misperceptions or outright irrational behavior. Where is the balance between the two approaches? Can consumer rationality be quantified? Recent work on the psychology of decisionmaking under uncertainty is promising.<sup>97</sup> However, this school of thought has yet to provide a simple and tractable framework, such as expected utility maximization, that can be used to analyze consumer protection issues. Work by economists looking at concepts in social psychology from an economic point of view has also been helpful.<sup>98</sup> More work of this kind is clearly needed.

All consumers exhibit different degrees of rationality in their buying behavior. Information seekers come closest to economists' ideal of the rational decisionmaker. The relative effectiveness of market remedies as compared with government regulations usually grows with the fraction of consumers who act rationally. Simple models, motivated by empirical data, in which consumers differ in their degree of rationality may be useful for analyzing the effectiveness of consumer protection policies.

#### *Market-based remedies*

Economic theory provides useful insights about when sellers and producers can be expected to provide truthful and relevant information to consumers. More work is needed to verify the empirical relevance of these insights.

Much could also be learned from cross-country studies comparing the extent to which sellers provide information voluntarily.

Casual observation indicates that the coverage of warranties for identical goods varies considerably across developing countries. Documenting this fact, and determining its relation to observable characteristics such as education, the legal redress system, and the number of public and private consumer organizations, among other variables, may be useful in determining appropriate strategies for promoting consumer policy in countries in which consumer protection is embryonic.

### *Law and economics*

New developments in the field of law and economics can benefit consumer protection considerably. The application of economic concepts to the study of the legal systems in developing countries is a promising research area.

Many developing countries would benefit from a thorough reform of their legal systems. It would not be surprising if reforming the legal system became a high priority once market-oriented reforms are in place. The extent to which radical changes will be possible during such a reform is hard to predict. Nonetheless, studies on the following topics may be useful:

- A study of the comparative effectiveness of jury systems and systems in which judges reach decisions. Such a study should include an analysis of which system produces a more effective outcome for various types of liability cases and of how often each legal system reaches the "correct" decision. Danzon (1991) undertook such an analysis for medical malpractice cases in the United States. Since liability cases are more likely to go to court when the outcome of a trial is uncertain (and both parties differ in their assessment of their chances of winning), a jury system may lead to higher transactions costs than a system in which judges make determinations.
- In some countries, such as the United Kingdom, the losing party in a trial must pay for all litigation costs. Although this practice reduces the number of frivolous cases brought to trial, it also deters litigants who might prevail but who are dissuaded from bringing suit by the uncertainty of the trial's outcome. In most other countries each party pays its own legal costs. It would be useful to study, at an empirical level, the effect of each of these alternatives on the legal system, possibly comparing different countries. The distributive impact of various regimes should be included in such an analysis.

In addition to comparing the percentage of cases that go to trial under each system, the analysis must also assess

the extent to which a fair outcome is achieved and the transactions costs incurred. Any work on this topic must model and estimate the uncertainties involved from the plaintiff's and defendant's point of view, and the actual uncertainty of the outcome, should the case go to trial.

- In some countries the investigations into a case are made by the same judge who later hands down a verdict; in other countries the two roles are carried out by different people. The incentives provided by both approaches differ substantially. Work could be done both to find empirical evidence documenting its relevance.
- Consumer protection seems well suited to common law, in which precedent plays an important role. Remarkably, the Mexican Consumer Protection Act of 1975 relies on common law despite Mexico's strong tradition in civil law. Yet common law has its disadvantages. Specifically, the degree of uncertainty faced by manufacturers is considerably larger than it would be if liability cases proceeded according to well-established codes. Work that pursued these issues in more depth would be useful, particularly if it combined the theoretical and empirical approaches.

### *Protection of economic interests*

A variety of measures that reduce consumer search costs merit detailed study, for example, the requirement that sellers quote prices by telephone. Such a requirement might substantially reduce consumer search costs, yet it might also facilitate seller collusion in certain markets. Also, enforcement might not be trivial.

More research in the area of advertising could also yield important new insights. For example, studies quantifying the effects of advertising on competition in developing countries might give useful guidelines for regulating (or promoting) advertising so as to protect consumers.

### **Conclusions**

This chapter has reviewed market-based and regulatory remedies that help protect consumers in a market economy, including legal instruments. These remedies include guarantees offered by sellers and producers' reputation-building efforts, information provision requirements, laws against deceptive business practices, product standards, safety regulations, quality seals, and product-testing magazines.<sup>99</sup> Rather than offer a cookbook with explicit recipes for protecting consumers in developing countries, this chapter has detailed the strengths and limitations of those remedies.

A given level of protection can be achieved at similar costs by very different combinations of policy instru-

ments. Policies on product safety offer an example of why a holistic approach to designing consumer protection policies is important.<sup>100</sup> Product safety can be achieved via product liability law, regulation, actions by producers, or exercise of care by consumers. These approaches differ in their informational requirements, the incentives they create to provide new information about emerging risks, their ability to respond to change, and the costs involved and their distribution. For example, regulation may involve setting standards, requiring testing and disclosure, or banning products completely. Information requirements prevent using regulation to achieve adequate levels of safety for more than a small fraction of goods. Thus, although regulation may be effective in providing adequate safety levels for many products, it must necessarily be combined with other approaches.

#### *Relevant differences in industrializing countries*

Most of the consumer protection literature has been motivated by, and relates to, problems facing consumers in industrial countries. This is so not only because industrial countries spend more on research; consumer protection also is a more important issue in industrial economies (for possible explanations, see chapter 7). This raises the question, what differences between developing and industrial countries are relevant for analyzing consumer policies?

First, developing countries have higher functional illiteracy rates. Consumers find it more difficult to comprehend a label or instruction manual and have a harder time evaluating risks in situations they have not encountered previously. This implies that more resources should be spent in preparing information materials. Using pictograms to communicate risks may be particularly important in developing countries. Higher functional illiteracy rates also imply that product standardization is more desirable in developing economies. For example, regulating use of the term "full warranty" would be particularly important.

Because of their low educational levels, consumers in developing countries are more vulnerable to deceptive business practices, such as false advertising. The welfare of low-income consumers may improve considerably if successful policies to protect them are in place.

Second, institutions that could play an important role in protecting consumers often function poorly in developing countries. For example, it is both difficult and inefficient to achieve adequate access to redress for consumers in a country whose legal system does not function well. Another institutional issue is how well government agen-

cies function.<sup>101</sup> Some countries lack the administrative capability to monitor consumer risks or enforce safety regulations; in other countries the institutional design of government agencies facilitates the co-optation of regulators by those they are supposed to supervise. In such countries promoting consumer protection through market mechanisms may be the most effective approach in the short run.

Closely related is the issue of government accountability. Government agencies in many developing countries bear no responsibility for providing poor or dangerous services. The lack of response of public utilities to consumer concerns is one of the arguments given for their privatization.

Third, many markets in developing economies do not function adequately for both institutional and informational reasons. Consider the car insurance market. When such a market begins to develop, insurance providers have no individual driving records. The problems of asymmetric information and adverse selection are particularly acute at this stage. Informational problems thus limit the size and operation of insurance markets during the early stages of its development.<sup>102</sup>

Thorelli (1982, 1983), who considered developing countries including Thailand, Kenya, and China, concluded that markets in developing countries share three deficiencies: (a) a majority of goods are manufactured locally without adequate quality control, (b) transportation and storage facilities are inadequate for preserving fresh foods, and (c) sellers care little about consumer satisfaction and frequently sell adulterated goods or cheat customers with respect to weights and measures. Since consumers are often poor and uneducated, Thorelli advocates government regulation not only to ensure adequate degrees of safety, but also to provide minimal quality standards.

Thorelli's work in developing countries is less relevant today than it was a decade ago, since globalization has reduced the difference between markets in industrial and developing countries. He equated developing-country consumers with poor consumers buying locally produced goods, ignoring a growing middle class with increasing access to goods from abroad.

#### *Additional policy conclusions*

Some final points are worthy of note here.

*Reputation and quality.* Sellers have incentives to provide truthful information on the quality of their goods when they know that failing to do so will be costly for them. They are more likely to offer truthful information in the case of repeat purchases and for goods whose true

quality the consumer can determine quickly. It follows that policies that foster long-run relations between sellers and customers are advisable.

*Private provision of information by third parties.* Private provision of information by third parties can play an important role in protecting consumers. Product-testing magazines and safety and quality seals provide useful information to consumers about products. When important externalities are involved, as with consumer magazines, government subsidies are advisable.

*Protection from abusive business practices.* Consumers in developing countries would benefit from laws protecting them from abusive business practices. Limitations on the provision of adhesion contracts, laws against deceptive advertising, and minimal requirements for producers' claims that goods are guaranteed, are all measures that can help protect consumers from abusive practices.

*Information provision requirements.* Information provision would seem an attractive way of protecting consumers, since it leads to better decisions without limiting consumer choice. Yet for this approach to be effective, consumers must read the information, understand it, and act on it. Ample evidence shows that things often go wrong at each of these steps. High illiteracy levels in developing countries further limit the value of consumer information. This does not mean that information provision has no role to play in consumer protection. For example, unit pricing significantly reduces the time and effort needed to compare the prices of various brands. The number of consumers who compare prices will grow significantly with the introduction of unit pricing, yet not as much as it would if all consumers were rational.

## Notes

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1. Consumer policies in New Zealand and Australia are explicitly aimed mainly at the disadvantaged. See McGregor 1991.
2. The relevance of this argument grows with the degree of correlation between income and people's abilities. Note, however, that some consumer protection policies may benefit high-income consumers at the expense of poor consumers. An example is offered below.
3. See Maynes 1988. The first four rights were introduced by President John Kennedy's influential 1962 address on consumer issues. See Lampman 1988 for details and Nadel 1971 for another

view on the importance of this address. The right to consumer education was formulated by President Gerald Ford in 1975; see Mohr 1988 for details.

4. See Oi 1972, 1977 for seminal works on the economics of safety.
5. The safety level provided is efficient if the cost to society of increasing safety provision slightly is equal to the social benefits this increase generates. Of course, this ignores distribution issues.
6. In this case consumer policies may harm the poor. This may happen more generally with consumer policies aimed at raising the quality of goods. To the extent that quality controls raise both quality and price, poor people may be hurt relative to those who are better off. The poor are unable to afford the higher-quality good and therefore lose when the low-quality good is no longer produced. The better-off benefit from the withdrawal of low-quality goods from the market both because of economies of scale and by avoiding mistaken purchases.
7. See United Nations 1986. Also see Merciai 1986, Harland 1987, and, for the case against the guidelines, Weidenbaum 1987.
8. This question is important because a law requiring sellers to provide all information that a consumer might find relevant is impossible to enforce. After all, information is an unusual good.
9. The word "consumer protection" did not appear in the *New York Times Index* until 1969.
10. Also presumed are no large indivisibilities relative to the economy and universality of markets.
11. By a suitable reallocation of initial resources. This result extends to the case with uncertainty, as long as universality of markets is understood to include markets for contingent claims.
12. So as to avoid interfering with the efficiency properties of the price mechanism.
13. For a more detailed review of many of the concepts covered in this section, see Arrow 1970, Pindyck and Rubinfeld 1992, Milgrom and Roberts 1992, Nicholson 1992, Varian 1992, Kreps 1990, and Tirole 1988.
14. The concept of moral hazard originated in the insurance industry. If a consumer insures his car, the fact of having insurance may lead to careless driving and make accidents more likely. Thus buying the good (insurance) changes the consumer's behavior in a way that makes the "production" of the good more expensive.
15. Consider a group of people with similar driving records. Since these records capture a combination of chance events and driving ability, some people will be better drivers than others and, other things being equal (such as the degree of risk aversion), will be prepared to pay less for insurance than drivers who know that they themselves, not chance events, caused their accidents. Some of the better drivers will decide not to buy insurance, thereby raising costs for the remaining drivers, forcing additional (better) drivers out of the insurance market, and so on. Taken to the extreme, this process of adverse selection may lead to the disappearance of an entire market; more generally, it results in markets that are considerably

smaller than they would be in a world with full information. See the pioneering work by Akerlof (1970).

16. The principal-agent problem is how to find ways to ensure that one individual, the agent, acts effectively on behalf of another, the principal. The problem is relevant only when there is uncertainty and the information available to the two participants is asymmetric. Under such circumstances, the principal cannot infer from observable evidence how effectively the agent has acted on his or her behalf and thus cannot judge the extent to which an observable outcome was determined by the agent's behavior and the extent to which it was caused by events beyond the agent's control.

17. This is the exclusion principle of Musgrave (1959). What is technically impossible at one moment in time may become technically feasible later; consider, for example, peak and off-peak usage of electricity, roads, and telephones.

18. Similarly, negative externalities are addressed through taxation.

19. That a good is public does not mean that it is provided by the government.

20. Perfect price discrimination consists of charging every consumer his or her reservation price. This practice is also referred to as first-degree price discrimination.

21. For example, American consumers can choose from more than 25,000 products at the supermarket; they can read any of 11,000 magazines or periodicals; and they can view more than 50 television stations. See Williams 1990.

22. The economics of information, and the importance of price search, originate with Stigler (1961). See Russo 1988 for a more detailed analysis along lines similar to what follows.

23. Such an analysis should consider how the policies being considered affect the variety of informal channels through which consumers acquire information.

24. Cardinal utility refers to a quantitative measure of the individual's welfare in a particular scenario. It should be contrasted with ordinal utilities, where such assignments are meaningless.

25. One of Savage's axioms is less appealing than it initially appeared to be—an issue I do not explore in this chapter. See Machina 1982.

26. I intentionally avoid the discussion of the objective and subjective interpretations of probabilities. The eclectic approach adopted here seems a reasonable compromise for the policy issues considered in this chapter.

27. This and other issues considered in this section are illustrated with vivid examples in Zeckhauser and Viscusi 1990.

28. For a representative collection of papers from this literature, see Kahneman, Slovic, and Tversky 1982.

29. See Plous 1993 for an up-to-date text on the psychology of judgment and uncertainty, including a detailed exposition of the concepts mentioned below.

30. The public's ratings are summarized by ranking the health risks from most to less dangerous; experts classify the health risks as high, medium, or low. The experts rate nine of the health risks as

high. The sum of the ratings by the public of these nine risks is 105; if the public's assessment were independent of the experts', this sum would (on average) be equal to 103.5. Thus a pure significance test (see Cox and Hinkley 1974) would give a p-value close to 0.50.

31. A closely related concept is that of bounded rationality; see Simon 1955, 1956.

32. Other reasons are the "cost" of creating the habit of using a safety belt and social norms. For more details, see chapter 7 of this volume.

33. See Ausubel 1991. For a dissenting view, see Brito and Hartley 1995.

34. Another important issue is how consumers gain access to information about prices and where goods are sold. This matters for goods in the three categories defined above and is considered in the section on market-based remedies.

35. It would seem that too much variety cannot be bad, yet this ignores the price that consumers pay for goods. When firms have market power, more variety may come at the expense of higher prices for all goods, which may make consumers worse off.

36. Risk-neutral producers may be induced to behave in a risk-loving manner by the asymmetry described above. The situation is analogous to the one considered in Stiglitz and Weiss 1981.

37. Regulations designed to change consumer behavior are considered in chapter 7 of this volume.

38. Even a full warranty system, however, may fall short of protecting consumers. These limitations relate to transactions and enforcement costs, on which the discussion focuses shortly.

39. An example is provided by automobiles. The duration of warranties for different auto parts relates to the extent that deficiencies depend on customer behavior. Also, to reduce the moral hazard problem, car manufacturers issue warranties requiring that cars be serviced by recognized dealers and only with new parts.

40. Strictly speaking, government regulation is not a pure market remedy. Still, it is more natural to discuss this topic here than in the next section.

41. In the United States the warranty disclosure provisions of the Magnuson-Moss Warranty Act of 1975 include the requirement that goods that cannot be repaired within a reasonable time must be replaced or the purchaser given a full refund.

42. Arthur Young & Co. 1979 and Schmitt, Kanter, and Miller 1979, quoted in Mayer 1989.

43. Watermelons are much less expensive in developing countries than in most industrial countries.

44. Manufacturers may have other reasons for not providing guarantees for products sold by informal retailers. First, formal retailers may threaten not to sell their goods. Second, if manufacturers can exert market power, it may be to their advantage not to sell their product at a low price.

45. In such a situation sellers are usually credit-constrained.

46. *The Economist*, December 19, 1992.

47. The high commissions and advertising expenses can be inferred from the fact that workers approaching retirement age receive

- phone calls from annuity sellers day and night to offer them trips to Miami and similar incentives for buying a particular annuity. An "informal" market providing the (confidential) home phone numbers of workers nearing retirement has developed.
48. The trade-off between simplifying customers' information processing and limiting their freedom of choice appears repeatedly when analyzing consumer policy.
49. See Tirole 1988, p. 107 for a simple model making this point. This model borrows elements from Salop 1977, Salop and Stiglitz 1977, and Wolinsky 1983.
50. There is evidence that the U.S. consumer price index may be overestimated as a result.
51. The appropriateness of this and more sophisticated dynamic pricing strategies depends on how consumers gather information and to what extent they act strategically; see Lazear 1986, Pashigian 1988, Pashigian and Bowen 1991, and Bitran and Mondschein 1993, among others.
52. There is convincing evidence that price dispersion in some markets is considerably larger than can be accounted for by any of the explanations discussed here (Pratt, Wise, and Zeckhauser 1979).
53. This is, once again, the hidden quality problem mentioned in the introduction.
54. The case of private parties is considered in this section. Public organizations are considered in chapter 7.
55. Since the firms issuing the bonds pay for the ratings, consumers pay for the ratings only indirectly.
56. These were defined in 1987 by the International Organization of Standardization.
57. ISO certification can be provided by both private and public organizations. Differences among the qualities of certifiers may emerge, as in Brazil, where ISO certification by a foreign certifier is more highly valued than certification by a local group.
58. The latter is provided by the Consumer Product Safety Association, a private Japanese organization.
59. DIN receives approximately 15 percent of its budget from the government, in exchange for which it must give priority to state requests to establish norms in particular fields.
60. Certifiers are usually liable only for accidents that occur within the country of issue.
61. See *ISO Bulletin*, July 1993. Similar problems occurred in Nigeria; see Agege 1987.
62. This problem is more relevant for consumer magazines than for news magazines, since the information provided by consumer magazines becomes obsolete at a slower rate.
63. Government regulation may be called for in the latter case.
64. An alternative is that government agencies provide this information directly; see chapter 7. With the exception of the United Kingdom, governments in Western Europe provide financial support for product-testing organizations.
65. The two major consumer organizations have already benefited from this provision; see Salgado and others 1994.
66. Complementary measures are needed to prevent such a subsidy from acting as a barrier to entry.
67. See Inman 1987 and Wolf 1988 for reviews of the failures of both governments and markets.
68. Spence 1977 considers a signaling model in which consumers underestimate failure probabilities and shows that safety is underprovided in the free-market equilibrium.
69. Since developing countries can free-ride on the knowledge on risk available in industrial economies, this is not a strong argument in favor of a liability law in developing countries.
70. Viscusi 1991a and the articles in the summer 1991 issue of the *Journal of Economic Perspectives*—especially Cooter 1991, Danzon 1991, Priest 1991, Shapiro 1991, and Viscusi 1991b—include rich discussions of theoretical issues pertaining to liability law and authoritative accounts of the U.S. liability crisis. A compelling argument in favor of regulation when large risks are involved can be found in Breyer 1993. Gerner 1988 and Crandall 1988 consider both government regulation and liability law when discussing consumer safety issues. This section draws from these sources.
71. As mentioned earlier, this poses a moral hazard problem on the consumer's side.
72. Since liability cases are more likely to go to court when the outcome of a trial is uncertain (and both parties differ in their assessment of their chances of winning), a jury system may lead to higher transactions costs than a system in which judges decide.
73. See *El Mercurio*, November 3 (p. C13), 4 (p. C11), and 5 (p. C11), 1993.
74. Alternative redress mechanisms for consumer grievances that circumvent the costly legal system are discussed in chapter 7.
75. This assumes that some consumers are unaware of the risks, do not read labels, and so on.
76. Zeckhauser 1979, 1985 analyzes food safety regulation in the United States based on this principle.
77. Risk-benefit analysis is not discussed in more detail here. See Crandall 1988 for a survey and Zeckhauser 1979, 1985 for an application to food safety.
78. See chapter 7 for an analysis of what determines whether a risk becomes an issue.
79. See Morgan 1993 for a more detailed discussion of risk analysis and risk management.
80. See Jarrell and Peltzman 1984 for a study of the direct and indirect costs faced by firms subject to a product recall.
81. This is based on the classification of the Food and Drug Administration.
82. This goes beyond the usual moral hazard problem on the consumer's side, since consumers confuse a reduction in risk with a total elimination of risk, thereby leading to an increase in accidents. This phenomenon is related to misassessments of low-probability events; see the first section of this chapter.



83. See chapter 7 in Tirole 1988 for an insightful discussion. This section draws from this source.
84. The most popular television show in Latin America, "Sábado Gigante," is an extreme example.
85. Note, though, that Rizzo and Zeckhauser 1990 shows that advertising inhibits entry of new physicians.
86. See Becker and Murphy 1993 for a dissenting view.
87. The theory of cognitive dissonance is due to Festinger 1957. According to this theory, people are motivated to reduce psychological inconsistencies. See Plous 1993 for details.
88. The relation between labeling and consumer protection is explored in Hadden 1986, 1991; this section draws from these sources.
89. Deciding what the labels should say and enforcing the information requirements may be more expensive.
90. Most people don't listen to the safety instructions announced on airplanes before takeoff, for example.
91. Another difficulty that consumers in developing countries face is that the labels of imported goods are written either in a foreign language or in unintelligible translations. This point is considered further in chapter 7.
92. This argument ignores the fact that the opportunity cost of the time needed to process the information is lower for those with less education; this effect should be small. Alternative policies for reducing risk usually have the effect of increasing prices. Which approach is more regressive must be determined on a case-by-case basis.
93. Unit pricing is labeling a good not only with its price but also with its price per standard unit (for example, pound or kilogram). See Russo and Leclerc 1991 for estimates of the time savings involved.
94. Because many consumers do not act rationally. See the first section of this chapter.
95. The present value of payments, including direct and indirect costs, can be used alternatively.
96. The International Organization of Consumer Unions also advocates ceilings on interest rates.
97. See Plous 1993 for a comprehensive text on the psychology of decisionmaking, in particular, on prospect analysis, an approach due to Kahneman and Tversky 1979.
98. Examples are Akerlof and Dickens 1982 and Akerlof 1991.
99. Education campaigns were also considered briefly. This topic is treated in more depth in chapter 7, which also considers private and public consumer organizations and special court proceedings.
100. The Japanese consumer policy framework is famous for following such an approach; see McGregor 1991.
101. Needless to say, this is often a problem in industrial countries as well.
102. This is so for two reasons. First, it reduces insurance prices, since fixed costs are shared by a larger pool of customers. Second, the cost of collecting damages is lower when both parties involved are insured.

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