



The Efficient Regulation of Consumer Information

Author(s): Howard Beales, Richard Craswell, Steven C. Salop

Source: *Journal of Law and Economics*, Vol. 24, No. 3, Consumer Protection Regulation: A Conference Sponsored by the Center for the Study of the Economy and the State (Dec., 1981), pp. 491-539

Published by: The University of Chicago Press

Stable URL: <http://www.jstor.org/stable/725275>

Accessed: 08/12/2009 10:09

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/action/showPublisher?publisherCode=ucpress>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



The University of Chicago Press is collaborating with JSTOR to digitize, preserve and extend access to *Journal of Law and Economics*.

THE EFFICIENT REGULATION OF CONSUMER INFORMATION*

HOWARD BEALES,
RICHARD CRASWELL,
and STEVEN C. SALOP
Federal Trade Commission

CONSUMER protection regulation has come under increasing fire from Congress, the courts, and the business community. Regulations have been criticized as costly, economically irrational, rigid, and paternalistic.¹ One response to these charges has been a movement away from traditional forms of regulation and toward interventions that are more compatible with consumer and seller incentives. In particular, there has been increased interest in techniques which ensure that consumers have sufficient information to protect themselves against unsafe products or unfair seller behavior.

Despite the general acceptance of this goal, analysis of how to efficiently provide consumer information has lagged behind. Information has traditionally been viewed as something which consumers either had or had not; and if they did not have it, the only solution was (somehow) to give it to them. Similarly, deception of consumers has been viewed as undesirable simply as a matter of definition, with the proper response to such deception being (obviously) to eliminate it.

While these simple prescriptions may be accurate as far as they go, they mask many of the complexities involved in the ways in which information is communicated to consumers and the ways that consumers (and the market) respond. This paper explores some of those complexities in an attempt to see how the legal system's efforts to improve consumer infor-

* The views expressed here are the authors' and do not necessarily reflect those of the Federal Trade Commission (FTC), individual commissioners, or other staff. This paper discusses ongoing research at FTC and elsewhere and thus reflects the contributions of many of our colleagues. We acknowledge especially those who shared responsibility for the FTC's Consumer Information Remedies (1979) and Post-Purchase Consumer Remedies (1980) reports, which examine many of these issues in more detail, and Robert Pitofsky and Richard Schmalensee for comments on an earlier draft.

¹ For a general critique, see Stephen Breyer, *Analyzing Regulatory Failure: Mismatches, Less Restrictive Alternatives, and Reform*, 92 Harv. L. Rev. 549 (1979).

[*Journal of Law & Economics*, vol. XXIV (December 1981)]

© 1981 by The University of Chicago. All rights reserved. 0022-2186/81/2403-0006\$01.50

mation might be made more effective. The first section briefly surveys some current legal standards applied to information issues, while the second presents an overview of the market forces affecting the generation and dissemination of consumer information. The third section analyzes some specific information remedies; the fourth summarizes the results in the form of policy recommendations.

I. CONSUMER INFORMATION IN THE LAW

A. *General Standards*

The importance of information to the operation of efficient markets is, by now, fairly well accepted. Information about price, quality, and other attributes allows buyers to make the best use of their budget by finding the product whose mix of price and quality they most prefer. In turn, buyers' ability to locate preferred products gives sellers an incentive to compete to improve their offerings by allowing buyers to find and reward (with patronage) the seller whose offer they prefer. Without such information, the incentive to compete on price and quality will be weakened, and consumer welfare will be reduced.

One measure of the level of acceptance these principles have achieved is their incorporation into various statutes and legal doctrines which require the disclosure of information to consumers.² For example, the common law, in the course of its movement away from a strict rule of *caveat emptor*, now requires sellers to disclose information about various risks their customers must bear.³ Congress has accelerated this movement by passing a number of statutes requiring sellers to disclose additional information, declaring that "informed consumers are essential to the fair and efficient functioning of a free market economy."⁴ The Federal Trade

² Another measure, of course, is the increased treatment of consumer information issues in the legal literature. For a sampling (hardly exhaustive) of recent general articles, see Alan Schwartz & Louis L. Wilde, *Intervening in Markets on the Basis of Imperfect Information: A Legal and Economic Analysis*, 127 U. Pa. L. Rev. 630 (1979); R. B. Reich, *Toward a New Consumer Protection*, 128 U. Pa. L. Rev. 1 (1979); Lewis A. Kornhauser, *Unconscionability in Standard Forms*, 64 Calif. L. Rev. 1151 (1976); Anthony T. Kronman, *Mistake, Disclosure, Information, and the Law of Contracts*, 7 J. Legal Stud. 1 (1978).

³ See, for example, William L. Prosser, *Handbook of the Law of Torts* 105-6 (disclosures necessary for "informed consent" to medical operations), 646-47 (seller's duty to warn buyers of potentially dangerous products) (4th ed. 1971). John D. Calamari & Joseph M. Perillo, *Contracts* 287-92 (contracts voidable under certain circumstances for seller's failure to disclose facts known to him) (2d ed. 1977). See also Uniform Commercial Code § 2-316(2) (modifications of implied warranties must be "clear and conspicuous").

⁴ Fair Packaging and Labeling Act, 80 Stat. 1296 (1966), *codified at* 15 U.S.C. §§ 1451-61 (1976). See also, for example, the Truth-in-Lending Act, 15 U.S.C. §§ 1601-65a (1976); the Interstate Land Sales Full Disclosures Act 15 U.S.C. §§ 1701-20 (1976); and the Real Estate Settlement Procedures Act, 12 U.S.C. §§ 2601-17 (1976).

Commission (FTC) has also required sellers to disclose more information on a variety of subjects, ranging from the efficiency of competing brands of home insulation⁵ to the proper laundering and care instructions for clothing.⁶ The FTC based its decisions on the principle that: "It is a basic tenet of our economic system that information in the hands of consumers facilitates rational purchase decisions; and, moreover, is an absolute necessity for efficient functioning of the economy."⁷ The Supreme Court used similar reasoning to strike down state laws which restricted the dissemination of consumer information, bringing "commercial speech" at least partly within the protection of the First Amendment: "So long as we preserve a predominantly free enterprise economy, the allocation of our resources will be made through numerous private decisions. It is a matter of public interest that those decisions, in the aggregate, be intelligent and well informed. To this end, the free flow of commercial information is indispensable."⁸

Even where the law has taken an approach other than directly increasing the amount of consumer information, its decisions have often been based on an information-related rationale. The protection of trademarks, for example, is based largely on the belief that distinctive trademarks make it easier for consumers to develop a body of information (largely from their own experience) about individual brands, thus rewarding sellers whose brands achieve a good reputation and penalizing those sellers whose brands do not.⁹ Restrictions on the enforceability of harsh contract clauses, imposed under the common law of unconscionability, have usually rested on a finding that the consumer either was unaware of the harsh clause's existence or lacked sufficient information to evaluate

⁵ Trade Regulation Rule, Labeling and Advertising of Home Insulation, 16 CFR § 460 (1980). The effective date of this rule was recently stayed by the commission, so it has not yet taken effect.

⁶ Trade Regulation Rule, Care Labeling of Textile Wearing Apparel, 16 CFR § 423 (1980).

⁷ Statement of Basis and Purpose, Labeling and Advertising of Home Insulation, 44 Fed. Reg. 50218, 50222 (1979).

⁸ *Virginia State Bd. of Pharmacy v. Virginia Citizens Consumer Council, Inc.*, 425 U.S. 748, 765 (1976). See also *Bates v. State Bar*, 433 U.S. 350 (1977). The FTC adopted similar reasoning in ruling against state laws preventing the advertising of prices of eyeglasses. Trade Regulation Rule and Statement of Basis and Purpose, Advertising of Ophthalmic Goods and Services, 43 Fed. Reg. 23992, 23999-24000 (1978). However, that aspect of the rule was subsequently remanded for a reconsideration of its necessity in light of the Supreme Court's commercial speech decisions. *American Optometric Ass'n v. FTC*, 626 F.2d 896 (D.C. Cir. 1980).

⁹ See *Smith v. Chanel, Inc.*, 402 F.2d 562, 566 (9th Cir. 1968); *Rogers, The Lanham Act and the Social Functions of Trademarks*, 14 *Law & Contemp. Prob.* 173 (1949). Compare *Friedman v. Rogers*, 440 U.S. 1 (1979) (ban on use of trade names by optometrists does not infringe on the First Amendment's protection of commercial speech).

the risks with which the clause dealt.¹⁰ Similarly, seller liability for defective products—either under common law tort liability or under federal regulation by agencies such as the Consumer Product Safety Commission (CPSC)—has been based at least in part on the belief that consumers' lack of information about the risks of injury from defective products had prevented the market from arriving at a proper allocation of those risks.¹¹

Despite this broad acceptance of the importance of consumer information, though, the law has yet to develop a satisfactory set of principles for determining *when* the government ought to respond to consumer information problems and *how* it ought to do so.¹² Congressional decisions have usually been ad hoc responses to specific public concerns, perhaps reflecting the nature of the legislative process. However, the judicial and administrative processes have not fared much better. The common law has dealt with these issues using legal concepts such as "unreasonable" risks or "unconscionable" contracts, both of which depend crucially on how one defines the point at which a risk becomes unreasonable or a contract unconscionable.¹³ The FTC, in addition to preventing deceptive advertising, has required disclosure of information under its legal authority to prevent "unfair" acts or practices¹⁴—an authority which has been defined only in the very general terms of preventing practices which cause "substantial injury to consumers," "offend public policy," or are "immoral, unethical, oppressive, or unscrupulous."¹⁵ While such standards

¹⁰ See Jeffrey C. Fort, *Understanding Unconscionability: Defining the Principle*, 9 *Loyola U. L. J.* 765, 782–94 (1978).

¹¹ See, for example, Prosser, *supra* note 3, at 655–56; Guido Calabresi & Jon T. Hirschoff, *Toward a Test of Strict Liability in Torts*, 81 *Yale L. J.* 1055, 1062 (1972).

¹² For a similar criticism, see Alan Schwartz & Louis L. Wilde, *Intervening in Markets on the Basis of Imperfect Information: A Legal and Economic Analysis*, 127 *U. Pa. L. Rev.* 630 (1979).

¹³ For varying views on current legal definitions, see Alan Schwartz, *A Reexamination of Nonsubstantive Unconscionability*, 63 *Va. L. Rev.* 1053 (1977); Richard A. Epstein, *Unconscionability—A Critical Reappraisal*, 18 *J. Law & Econ.* 293 (1975); M. P. Ellinghaus, *In Defense of Unconscionability*, 78 *Yale L. J.* 757 (1969); Arthur Allen Leff, *Unconscionability and the Code—The Emperor's New Clause*, 115 *U. Pa. L. Rev.* 485 (1967).

¹⁴ 15 U.S.C. § 45 (1976).

¹⁵ *Statement of Basis and Purpose, Unfair or Deceptive Advertising of Cigarettes in Relation to the Health Hazards of Smoking*, 29 *Fed. Reg.* 8324, 8355 (1964). See also *FTC v. Sperry & Hutchinson Co.*, 405 U.S. 233, 244 n.5 (1972); *Spiegel, Inc., v. FTC*, 540 F.2d 287, 293 n.8 (7th Cir. 1976); *Heater v. FTC*, 503 F.2d 321, 323 (9th Cir. 1974). For critical views of this definition, see Teresa M. Schwartz, *Regulating Unfair Practices under the FTC Act: The Need for a Legal Standard of Unfairness*, 11 *Akron L. Rev.* 1 (1977); U.S. Senate Committee on Commerce, Science, and Transportation, 96th Cong., 2d Sess., *Unfairness: Views on Unfair Acts and Practices in Violation of the Federal Trade Commission Act* (Comm. Print 1980). See also Richard Craswell, *The Identification of Unfair Acts and Practices by the Federal Trade Commission*, 1981 *Wis. L. Rev.* 107. The FTC recently elaborated on its interpretation of this standard in a letter to Senators Wendell H. Ford and John C. Danforth (December 17, 1980).

are certainly flexible enough to allow an informed analysis of the way in which information affects a market,¹⁶ there is no legal requirement that they be used in this way.

The Supreme Court, too, has relied on extremely general standards in judging state laws which restrict consumer information against the requirements of the First Amendment. As announced in its most recent decision, the Court simply asks in general terms whether the state's interest in restricting the information is "substantial," whether the restriction in question "directly" advances the state's interest, and whether the restriction is broader than "necessary" to serve that interest.¹⁷ Again, such standards are obviously flexible enough to permit the Court to analyze the role of information in the market in question—but the standards themselves contribute nothing toward developing such an analysis.

B. Deception

The difficulties of analyzing consumer information problems under current legal standards are illustrated by the law of deceptive advertising. Under the FTC Act (the most general federal antideception law), a distinction is occasionally drawn between merely preventing deception and affirmatively increasing the informative value of advertising.¹⁸ A similar distinction was observed at common law¹⁹ and would probably be implicit in most ordinary usage of the term "deception." However, the law of deception has now developed to the point of virtually eliminating any line between advertisements which are deceptive and advertisements which simply fail to inform. Indeed, it is not too broad a statement to say that present legal doctrine could make every advertisement in the country potentially deceptive. Obviously, the law has not been applied in such an extreme fashion as the FTC and the courts have stopped short of prohibiting all advertising. However, the legal definition of deception does

¹⁶ See, for example, Statement of Basis and Purpose, Labeling and Advertising of Home Insulation, 44 Fed. Reg. 50218, 50222–23 (1979) (analysis of free-rider problems preventing insulation sellers from educating consumers concerning insulation's energy efficiency).

¹⁷ *Central Hudson Gas & Elec. Corp. v. Public Service Comm'n*, 100 S. Ct. 2343, 2350–51 (1980). The court also implied that these standards would not apply to commercial speech which was more likely than not to be deceptive; *id.* at 2350. For a critical analysis of this aspect of the court's commercial speech decisions, see Robert B. Reich, *Preventing Deception in Commercial Speech*, 54 N.Y.U. L. Rev. 775 (1979).

¹⁸ See, for example, *Alberty v. FTC*, 182 F.2d 36, *cert. denied*, 340 U.S. 818, 819 (1950).

¹⁹ See, for example, 12 *Williston on Contracts* § 1497, at 381–84 (3d ed. 1970). See also *American Home Products Corp. v. Johnson & Johnson*, 577 F.2d 160, 166 n.14 (2d Cir. 1978), invoking a similar distinction in a private suit under § 43(a) of the Lanham Act, 15 U.S.C. § 1125(a) (1976).

not require any such stopping place, nor does it offer any principles to suggest where a good stopping place would be.

The major difficulty in understanding the law of deception comes from the ambiguity as to just what it means to deceive or to be deceptive. This will seem to many to be a question with an obvious answer; perhaps this is why the law has never explicitly addressed it beyond defining deception circularly to mean a "tendency or capacity to deceive." In practice, though, the law has (implicitly) used a number of more specific definitions, some of which are not at all obvious. Their combined effect is what gives deception law its breadth.

As a starting point, a deceptive advertisement might be defined as one which makes a false statement about the product (or about the seller, the terms of sale, or any other material fact). This is the case of the seller who claims that "our product will cure baldness" when in fact it will not. Though this definition is the narrowest of those used by the law, it is clearly at the core of most people's understanding of deception. It also has the convenient property that claims which meet this standard contribute nothing to consumer welfare, so—enforcement costs aside—there is no reason not to forbid such claims.²⁰ At a minimum, then, it can be said:

*Definition 1: An Advertisement Is Deceptive If It Makes a False Claim about Any Material Fact.*²¹ This definition is too narrow, though, because the law is also concerned about the effect of the advertising claim on consumers' beliefs. An advertisement may be literally true but still lead many consumers to draw false inferences about the product, with the same effect (as far as those consumers are concerned) as if the false inferences had been stated explicitly. For example, a seller may claim that "no product is more effective in curing baldness" (true, if all are equally ineffective) or that the product "kills bacteria which cause baldness" (true, but irrelevant to the vast majority of men whose baldness is due to hereditary factors).²² A strictly logical consumer would not jump to the

²⁰ This ignores the rather paternalistic and speculative possibility that a false claim may have the benefit of persuading ignorant consumers to purchase a product that would in fact provide satisfaction—but this fact would not be known until after the product had been purchased.

²¹ "Material" here refers to a fact which influences some consumer action or decision, usually (but not necessarily) the purchase decision. Compare *Exposition Press, Inc., v. FTC*, 295 F.2d 869 (2d Cir. 1961), *cert. denied*, 370 U.S. 917 (1962) (deception inducing consumers to make an initial contact with the seller). Deception which does not influence any consumer behavior is presumably harmless and thus would not be considered material. See generally Note, *Developments in the Law—Deceptive Advertising*, 80 *Harv. L. Rev.* 1005, 1056–63 (1967).

²² Compare *Ward Labs, Inc., v. FTC*, 276 F.2d 952 (2d Cir.), *cert. denied*, 364 U.S. 827 (1960).

inference that the product will be effective in curing his baldness, since neither of these statements (if interpreted literally) carries that claim as a logical implication. On the other hand, even the literal meaning of a sentence is at bottom a matter of semantic convention, and it could certainly be argued that the meaning of a sentence (and of its surrounding context) can be defined only by reference to what its audience takes it to mean.²³ In any event, the relevant empirical issue is whether consumers will respond to the statements quoted above by forming the natural but inaccurate belief that the baldness cure *is* effective. If they do, then these consumers will be led by the advertisements to make an erroneous purchase decision, and the advertisements will be deemed legally deceptive.²⁴ Thus, the following definition is also appropriate:

Definition 2: An Advertisement Is Deceptive If It Produces an Inaccurate Belief about Any Material Fact in (Some) Consumers. With this definition, the focus has shifted from the advertising message itself to the beliefs that that message gives rise to in consumers. Two issues then arise. How many consumers must hold the inaccurate belief, or how unreasonable must that belief be, before the courts will refuse to hold the advertiser responsible?²⁵ There is legal authority for the proposition that the ban on deception was intended to protect “the ignorant, the unthinking, and the credulous” as well as the more cautious consumer,²⁶ and advertisements have been ruled deceptive even when only some 10 or 15 per cent (or possibly even less) of the consumers who saw the advertisement might have formed the incorrect belief.²⁷ This tendency to hunt for the most gullible elements of the population and to judge an advertisement by its

²³ Thus, in legal terminology, the belief induced by an advertisement is often referred to as the advertisement’s “implied claim.” See, for example, *Firestone Tire & Rubber Co. v. FTC*, 481 F.2d 246 (6th Cir.), *cert. denied*, 414 U.S. 1112 (1973).

²⁴ However, the FTC need not introduce evidence showing that any consumers actually did form an inaccurate belief as a result of the advertisement. Legally, it is sufficient if the FTC finds, on the basis of its own experience and expertise, that the advertisement had a tendency or capacity to produce that effect. See generally Ernest Gellhorn, *Proof of Consumer Deception before the Federal Trade Commission*, 17 U. Kan. L. Rev. 559 (1969).

²⁵ Compare *Heinz W. Kirchner*, 63 F.T.C. 1282, 1298 (1963), *aff’d*, 337 F.2d 751 (9th Cir. 1964): “An advertiser cannot be charged with liability in respect of every conceivable misconception, however outlandish, to which his representations might be subject among the foolish or feeble-minded. Perhaps a few misguided souls believe, for example, that a ‘Danish Pastry’ is made in Denmark. Is it therefore an actionable deception to advertise ‘Danish Pastry’ when it is made in this country?”

²⁶ See, for example, *Charles of the Ritz Distributors Corp. v. FTC*, 143 F.2d 676, 679 (1944) (claim that skin cream would “rejuvenate” skin); *Gelb v. FTC*, 144 F.2d 580, 582 (1944) (claim that dye would “permanently” color hair).

²⁷ See *Firestone Tire & Rubber Co. v. FTC*, 481 F.2d 246, 249 (6th Cir.), *cert. denied*, 414 U.S. 1112 (1973); *Benrus Watch Co. v. FTC*, 352 F.2d 313 (8th Cir. 1965), *cert. denied*, 384 U.S. 939 (1966).

effect on them has often been criticized by the commentators.²⁸ Perhaps in response to such criticisms, more recent decisions suggest that the FTC (if not the courts) may in fact have moved away from so extreme a standard.²⁹

However, even setting aside the issue of how many and how reasonable the consumers who are deceived must be, this still leaves the question of what it means to say that even a single consumer (reasonable or not) is deceived.³⁰ Definition 1 defined deception in terms of the falsity of the words of the advertisement; definition 2 found deception if the advertisement was found to have caused a false belief. The law is not limited to these two definitions, though, for it also extends to advertisements or labels which fail to correct a preexisting inaccurate belief. It is deceptive, for example, to sell an abridged version of a book without disclosing that it is not complete³¹ or a used product without disclosing that it is not new.³² The same is true of selling recycled oil without disclosing the fact that it has been recycled³³ or imported products without disclosing that they were not made in the United States.³⁴ It has also been ruled deceptive to sell goods on credit without disclosing that the consumer's note would be discounted to a holder in due course, thus making the consumer unconditionally liable for the purchase price even if the seller failed to keep his end of the bargain.³⁵

In these cases, it was not the advertisements which led consumers to believe that the books were unabridged, or that the oil was new, or that their notes would not be discounted under the holder-in-due-course doctrine. The advertisements did not even refer to these aspects of the trans-

²⁸ See for example, George J. Alexander, *Federal Regulation of False Advertising*, 17 U. Kan. L. Rev. 573, 573-75 (1969).

²⁹ See *Bristol-Myers Co.*, 85 F.T.C. 688 (1975); compare *Coca-Cola Co.*, 83 F.T.C. 746, 813-18 (1973), with *id.* at 802-6 (dissenting statement of Commissioner Jones).

³⁰ Some commentators have referred to this as the "existence" (of deception) issue, as distinguished from the "n per cent" issue discussed in the preceding paragraph. See J. Edward Russo, B. L. Metcalf, & D. Stephens, *Toward an Empirical Technology for Identifying Misleading Advertising* (1980) (unpublished manuscript, at Univ. of Chicago, Grad. School of Business); Gellhorn, note 24 *supra*.

³¹ *Bantam Books v. FTC*, 275 F.2d 680 (2d Cir.) *cert. denied*, 364 U.S. 819 (2d Cir. 1960); *New American Library of World Literature, Inc. v. FTC*, 227 F.2d 384 (2d Cir. 1955).

³² *Hugh J. McLaughlin & Son, Inc.*, 66 F.T.C. 387 (1964); *Purofied Down Prods. Corp.*, 48 F.T.C. 155 (1951).

³³ *Double Eagle Lubricants, Inc. v. FTC*, 360 F.2d 268 (10th Cir. 1965); *Mohawk Ref. Corp. v. FTC*, 263 F.2d 818 (3d Cir.), *cert. denied*, 361 U.S. 814 (1959).

³⁴ *Brite Mfg. Co. v. FTC*, 347 F.2d 477 (D.C. Cir. 1965); *Delaware Watch Co. v. FTC*, 332 F.2d 745 (2d Cir. 1964).

³⁵ *All-State Industries, Inc. v. FTC*, 423 F.2d 423 (2d Cir.), *cert. denied*, 400 U.S. 828 (1970).

actions. Rather, these beliefs were expectations that most consumers naturally brought with them to these products, and the advertisements were deemed deceptive because they failed to inform consumers that those expectations were inaccurate. To reach these cases, then, another definition is needed:

*Definition 3: An Advertisement Is Deceptive If It Leaves (Some) Consumers with Inaccurate Beliefs about Any Material Fact.*³⁶ The difference between definitions 2 and 3 is that definition 2 requires the false belief to have been induced by the advertisement, while under definition 3 it is sufficient if the advertisement fails to correct a preexisting false belief. Again, this is partly a semantic distinction, for one could just as easily argue that to advertise a product as a “book” (much less as a specific book, such as *Gone with the Wind*) is to say that the product offered for sale is the unabridged version. The extent to which the meaning of words in commercial usage is influenced by parties’ normal expectations is no doubt an interesting linguistic and legal issue,³⁷ but it is an issue which has not played a major part in deception law. Rather than engage in such exercises, the courts have simply treated these cases as a particular subset of deception usually referred to as “deception by omission.”³⁸

Finally, even this definition may still require some more refining. Definition 3 applies only when consumers have an inaccurate belief about the information that was withheld, and there is indeed some authority to the effect that without such a belief on the part of consumers the law will not find deception.³⁹ However, it is somewhat unclear just what this adds to the requirement that the information that has not been disclosed be *material*. If disclosing the additional information would not change the consumer’s behavior, then the additional information is not material, and there is no material deception anyway—but if the additional information would change the consumer’s behavior, then his previous uninformed behavior must have been based on a different (and hence incorrect) prior belief. The consumer may not have consciously formed that belief, of

³⁶ Note that this definition also raises the issue discussed in notes 25–29 *supra* as to how many consumers must hold the inaccurate belief (and how reasonable that belief must be).

³⁷ This issue often arises in cases involving the construction of contractual language, for example, or in applying express or implied warranties of merchantability.

³⁸ This definition was explicitly codified (with respect to food and drug advertisements) in § 15 of the FTC Act, 15 U.S.C. § 55(a)(1) (1976): “[I]n determining whether any advertisement is misleading, there shall be taken into account (among other things) not only representations made or suggested by statement, word, design, device, sound, or any combination thereof, but also the extent to which the advertisement *fails to reveal* facts material in the light of such representations or material with respect to consequences which may result from the use of the commodity . . .” (Emphasis added.)

³⁹ See *FTC v. Simeon Management Corp.*, 532 F.2d 708, 715–16 (9th Cir. 1976).

course; it may only be inferable from his behavior.⁴⁰ But the cases do not require anything that could be called a conscious belief about the undisclosed information before the failure to disclose will be deemed deceptive. Most consumers do not consciously ponder the issue of what a seller is likely to do with their notes, for example, much less conclude that the seller probably will or will not discount them to a holder in due course.⁴¹ Nor do they explicitly decide that an advertised product is probably new rather than used; more commonly, they do not even think about that issue. Thus, definition 3 is practically equivalent to the following:

Definition 4: An Advertisement Is Deceptive If It Fails to Disclose Any Information Which Would Change (Some) Consumers' Behavior. By now, it should be apparent why virtually every advertisement is potentially deceptive. It is not because of the proportion of the audience that needs to be deceived, or the gullibility that can be attributed to that audience, for these factors are rarely influential in current legal decisions. The main problem lies with the standard of what it means for any consumer to be "deceived" which could be met by any advertisement that does not supply perfect or total information. Under the last two definitions, a consumer will be deceived as long as he does not have accurate information on every material point, or as long as there is still additional information the seller could disclose that would bear on the purchase decision. But no advertisement can disclose every relevant piece of information, nor would we want sellers to do so if they could. Information is costly, and perfect information is neither feasible nor desirable—but the law of deception gives no standard for determining how far short of that point the courts should stop.

This does not mean that the law has actually been applied to this extreme, of course. In practice, the FTC and the courts have recognized that advertisements cannot be required to carry every relevant piece of information about a product, and their decisions have implicitly been tempered by this recognition.⁴² The point is that such recognition is often only

⁴⁰ Compare H. Raiffa, *Decision Analysis: Introductory Lectures on Choices under Uncertainty* 161–66 (1968).

⁴¹ The commission found that consumers expected that their notes would not be discounted but did so on the basis of its own experience with the credit market and not on the basis of any empirical evidence. *All-State Industries, Inc.*, note 35 *supra*, 75 F.T.C. 493–94 (1967).

⁴² See, for example, *ITT Continental Baking Co., Inc.*, 83 F.T.C. 865, 965 (1973), *aff'd in relevant part*, 532 F.2d 207 (2d Cir. 1976): "[A]n absolute claim for good nutrition may well be objectionable for the reason that the advertisement omits things that should be said. On the other hand, it would be unrealistic to impose upon the advertiser the heavy burden of nutritional education, especially with respect to radio and TV commercials which in many cases are shorter than 30 seconds and seldom as long as 60 seconds." The commission therefore refused to require advertisements for enriched snack cakes to disclose that the cakes were also high in sugar.

implicit, and the trade-offs between the benefits and costs of improving the information provided by sellers have often been unexamined. The legal concepts applied in deception cases do not tell either the courts or the advertisers subject to their jurisdiction how those trade-offs ought to be made.

The problem, at bottom, is that there is no easy way of distinguishing deception from the larger problem of inadequate consumer information. In some cases, deception does involve the dissemination of literally false claims or "false information," but more commonly it merely involves consumers' relying on true but incomplete information to reach imperfect decisions. However, perfect decision making is not ever possible, so the real issue is when the government can or ought to intervene in the information market to improve the market's performance. The focus should be not so much on the effect of an existing advertisement as on whether there is anything the legal system can do to make matters better.

This could suggest a more limited definition of deception:

Definition 5: An Advertisement Is Deceptive If It Fails to Disclose the Information That Would Be Optimal under the Circumstances. However, this simply begs the question of how much and what kinds of informations would be "optimal." While this is undoubtedly the proper question to ask, answering it requires a much finer understanding of consumer information markets than is reflected in current legal doctrine. The remainder of this paper attempts to supply that understanding by analyzing markets for consumer information and the effects of governmental intervention.

II. INFORMATION MARKETS AND MARKET FAILURES

Although consumers may desire information for its own sake, most demand for product information is derived from the demand for products themselves. That is, consumers desire information in order to improve the level and likelihood of satisfaction derived from commodities purchased in the marketplace. To satisfy this demand, a diverse set of information sources have arisen in the economy. Consumers produce prepurchase information themselves from direct inspection of commodity attributes. These attributes may be desired for their value in consumption, their utility as signals of other unobserved attributes, or both. Information gleaned from past experience influences purchase decisions and is essential for constructing signals. Experience may also be used to define conditions of contingency payments after more information is available, as with warranties or trial periods. Consumers also purchase information, certifications, and warranties from a variety of intermediaries like jour-

nalists, termite inspectors, attorneys, and other consultants.⁴³ Consumers are also given information by interested sellers who may substantiate it themselves or purchase certification from intermediaries like Underwriters Laboratory (UL). Finally, consumers may benefit from the information-gathering activities of others, either directly, in the form of recommendations, or indirectly, in the form of reputation and other market signals.

The economic incentive for consumers to gather information is strong. Increases in the efficiency of purchase decisions made are equivalent to increases in real income, and, given the diversity of choices available in a modern economy, improved choices can lead to a large gain. In many markets, price dispersion is substantial for identical or similar products.⁴⁴

At the same time, sellers have a substantial economic incentive to disseminate information to consumers. Indeed, if information dissemination were costless to sellers, theory suggests that disclosure would be complete. It is reasonable to suppose that, in the absence of additional information, consumers would view all brands as equivalent (for example, average), though the brands differed in fact. In this case, sellers of above-average brands have an economic incentive to disclose the status of their brands in order to distinguish from below-average competitors. Given these disclosures, consumers might begin to perceive that the average value of nondisclosing sellers is lower. The process does not end here. This consumer perception creates, in turn, a new incentive for those of the remaining nondisclosing sellers who are above the average to disclose their advantage. This would again lower the average of nondisclosing sellers, and so on, until every seller discloses.⁴⁵

Thus, one might argue that the overall richness and competitiveness of information markets imply that it is *never* efficient to mandate the generation or dissemination of currently undisclosed information. However, market failures may prevent an efficient quantity and quality of product information from being provided, even if there are no artificial impediments to competition in the information market. Such market failures are virtually inherent in information provision. Yet, at the same time, this does not mean that every deviation from perfect information should be

⁴³ One interesting example is Good Housekeeping magazine, which offers a guarantee for some products that purchase advertising space from it.

⁴⁴ There have now been many empirical studies of price dispersion. See, for example, John W. Pratt, D. Wise, & R. Zeckhauser, Price Differences in Almost Competitive Markets, 93 Q. J. Econ. 189, 206 (1979); Life Insurance Cost Disclosure (FTC Staff Report 1979).

⁴⁵ As a theoretical matter, this is the "lemons" process in reverse. See Sanford Grossman, The Economic Theory of Disclosure, 24 J. Law & Econ., this issue.

corrected. Information is costly to produce and to disseminate, and at some point the provision of additional information is no longer socially optimal.

We begin by discussing the variety of possible failures that may occur in the production and sale of information. This analysis is followed by a discussion of the possible *product market* failures and marketplace institutions that arise as a result of informational imperfections. At the outset, the reader is cautioned that information economics is perhaps the most confusing branch of the dismal science. Because the demand for information is derived from the demand for products, failures in one market feed back on the other in a circular fashion.

A. Possible Information Failures

a) Market-perfecting Benefits. The first and most ubiquitous market failure arises from the fact that information has *public good* properties. The purchase, production, and use of information by consumers generate a market-perfecting external benefit to uninformed consumers. Additional information induces sellers to compete for the patronage of informed consumers by offering better values—either lower prices or higher qualities. This induced competition also benefits those uninformed consumers who purchase randomly. Although perfect markets do not require all consumers to be perfectly informed, this externality implies that too little product information will generally be produced, even in an otherwise competitive information market.⁴⁶

b) Natural Monopoly and Free-Rider Problems. Two other characteristics of information generation and dissemination are that, once generated, information can be disseminated at low marginal cost (natural monopoly), and buyers can resell purchased information to others (free-rider externality). Either factor may lead to an undersupply of information. These have often been cited as a cause of shortages of third-party information providers.

One partial market solution to these problems is the provision of advertising and other information without charge by interested sellers. By internalizing some of the gain in the form of higher profits, advertisers partially avoid this free-rider problem. However, seller-provided information creates other externalities of its own. In particular, advertising that provides positive general information about all brands in a product class benefits every brand, not simply the one generating the information. Similarly, negative information about a competing product class is likely

⁴⁶ Steven Salop, *Information and Monopolistic Competition*, 66 *Am. Econ. Rev.* 240 (1976).

to benefit all substitute products, thus reducing the incentive of any single seller to provide this information. The general effect of these externalities is to lead to an undersupply of general information.

Sellers can attempt to eliminate these free-rider problems in a number of ways. Trade association-sponsored generic advertising funds or manufacturer-retailer cooperative advertising plans (perhaps including exclusive territories or other vertical restraints) are probably the most common, although these suffer from the obvious disadvantage of risking antitrust challenge. Sellers may also attempt to internalize the benefits of generic information by stating simply that *their* product possesses the desired attribute (or lacks the undesired ones) without mentioning that all competing brands do too. If some consumers are unaware that all brands are alike on this point, more of the benefits of the information will accrue to the seller who makes the disclosure—at least until his competitors begin imitating the claims. One drawback, however, is that such disclosures may be seen as implied claims that the advertiser's product uniquely possesses the desirable attributes, thus risking a charge of deceptive advertising or spurious product differentiation.

This difficulty, unfortunately, is fundamental to the relationship between information and product markets. Information is needed to make product markets perform optimally, but if sellers are to provide that information then they must be given an incentive to do so. When information benefits all sellers equally, though, this incentive disappears as far as any individual seller is concerned. One way to restore the incentive is to give some seller(s) sufficient market power to capture most of the benefits of the information, where "market power" could come in the traditional sense from a monopolistic or oligopolistic market structure or from a perceived monopoly caused by differentiating one seller's products from others in the minds of consumers. But such a market—though it may restore the incentives to generate the optimal amount of information⁴⁷—requires an imperfectly competitive structure which itself may create other imperfections in the performance of the product market. Thus, either solution throws the policymaker into the difficult world of second best, where the interrelationships between market structure and incentives to disseminate information must all be carefully considered.

In spite of these potential natural monopoly and free-rider problems, there is a large industry of experts and other informational intermediaries from whom consumers can purchase valuable marketplace information. Agents such as newspapers and shopping guides provide general informa-

⁴⁷ As will be seen, though, imperfectly competitive markets are also unlikely to generate the optimal amount of information. See text at notes 57–61 *infra*.

tion at low cost about a variety of competing products. Other intermediaries, such as doctors, designers, and real estate brokers, provide more specific information tailored to the particular needs of the purchaser. Providing such specific information offsets the free-rider problem at least partially, and scale economies are often small enough to make the natural monopoly problem insignificant.

However, this solution has its own problems. By the very nature of the transaction, the consumer is uninformed relative to the expert. Thus, the consumer is often unable to judge the quality of the service received.⁴⁸ This problem is compounded when the expert must then be used to design a treatment or solution which is itself difficult for consumers to evaluate. As a result, experts may offer treatment jointly with the diagnosis to permit consumers to evaluate both services in combination. This arrangement creates its own potential problems, though, as the expert who recommends overly expensive or unnecessary treatments may be discovered only after long experience, if at all.

When scale economies in information generation and dissemination lead to natural monopoly problems, information intermediaries can achieve a high level of market power, though it may not be exercised in practice. Even in the absence of natural monopoly, legislatures sometimes create this power in various regulations and statutes. For example, local building codes often require building materials to be certified by one or more specific standard setters (for example, UL or American Society for Testing and Materials [ASTM]) rather than simply that materials achieve a performance level equal to those standards. Professional licensing contingent on certification by a self-regulation body has similar properties. In these cases, the standard setters can have the power to deter competition by arbitrarily preventing new entry and by setting inefficient standards.⁴⁹

c) *False Claims.* Disseminating false information and withholding negative information about a brand are obviously profitable in the short run, if the claims are believed and not countered by others. Although repeat purchases based on experience and reputation provide some market check on this strategy, some attributes may be learned only after long

⁴⁸ A partial solution is to establish long-term relationships with experts who have provided satisfactory service in the past or to rely on reputations and recommendations from acquaintances in selecting an expert. See Michael R. Darby & Edi Karni, *Free Competition and the Optimal Amount of Fraud*, 16 J. Law & Econ. 67 (1973).

⁴⁹ One particularly serious problem is that standard setters often formulate arbitrary *design* standards (for example, pipe must be copper) rather than *performance* standards (for example, pipe must withstand x psi of pressure). This may act to deter or delay innovation. See FTC Staff Report, *Standards and Certification* (December 1978).

experience, if at all.⁵⁰ Competitors may also have an insufficient incentive to counter false or limited information, for at least two reasons. First, competitors may share the same negative attribute, as with the health hazards of cigarettes. Second, in a competitive market, the increased patronage from the corrected consumer beliefs must be shared with other competitors, leading to the free-rider problems discussed above.⁵¹ In this sense, oligopolistic markets may provide a superior flow of counteradvertising than competitive ones, since the benefits are better internalized.

Moreover, even false claims which have been effectively countered still inflict a negative externality on sellers in general. If consumers believe that some proportion of claims are false, they may choose to ignore advertising information altogether or may restrict their attention only to claims that sellers have substantiated and have had certified by independent third parties. Such certification is costly and may itself be imperfect (since certifiers may themselves require certification). Without some such assurance, though, the value of seller-provided information is reduced, and sellers consequently have less incentive to produce it.

In this regard, it should also be noted that consumers may not always protect themselves by gathering and rationally evaluating the optimal amount of product information. For example, consumers may underestimate the value of additional information simply because they lack other data that would tell them of their need to learn more. Consumers' information-processing skills are also imperfect. Consumers, like anyone else, can make false deductions or errors of judgment. Moreover, consumers can also be poor negotiators and may be persuaded by insistent salesmen to "buy the product now" without waiting to acquire additional information.⁵² While these problems can be formally (and tautologically) analyzed as a change in consumers' preferences for information, it seems more sensible to treat them as factors which lead the market to generate less information than informed consumers would "really" prefer.

d) Signal Competition. Information may be valued not only for itself but also as a signal for other product attributes. For example, Nelson has shown that one function of high advertising expenditures is to provide a credible (self-enforcing) signal of product value.⁵³ Because superior prod-

⁵⁰ Darby & Karni, note 48 *supra*.

⁵¹ Robert Pitofsky, *Beyond Nader: Consumer Protection and the Regulation of Advertising*, 90 Harv. L. Rev. 661 (1977).

⁵² See A. Tversky & D. Kahneman, *Judgment under Uncertainty: Heuristics and Biases*, 185 Science 1124 (1974); H. Simon, *Motivational and Emotional Controls of Cognition*, 74 Psychological Rev. 473 (1967); J. Bettman, *Consumer Information Acquisition and Search Strategies*, in *The Effect of Information on Consumer and Market Behavior* (A. A. Mitchell *et al.* 1978).

⁵³ Phillip Nelson, *Information and Consumer Behavior*, 78 J. Pol. Econ. 311 (1970).

ucts obtain more repeat purchases by satisfied purchasers from a given trial rate, these brands have a greater incentive to advertise to obtain trial. Similarly, market share may itself be a signal of value to an uninformed consumer, since relative market shares indicate the relative valuations of other buyers.

Although such signals can often provide valuable information at low cost, they are not without limitations. First, these signals may be highly imperfect. For example, the first entrant in a product class may maintain its high share solely from the force of its historical monopoly, rather than from superior value, if a market share signal is used.⁵⁴ Second, the validity of the signal will depend on the other functions of the attribute. For example, suppose advertising has the dual role of providing objective product information and serving as an indirect signal of value. In that advertising is a substitute for information diffusion by satisfied buyers, lower-valued brands may have an incentive to advertise more, even if this results in a negative signal being implied. Third, signaling competition generally leads to overinvestment in the signal.⁵⁵ Given that the market provides too little information because of other problems, though, this signal overinvestment may provide a partial offset. Finally, signal competition may be self-destructive. As sellers overinvest in the signal to exploit its information value, they may destroy its information content in the process. For example, the softness of bread has lost its value as a signal of freshness.⁵⁶

e) Market Power. If firms have market power in the product market, they may have an incentive to exploit or even create uncertainty or imperfect information. In this regard, Heal has shown that a seller with market power may find it profitable to produce a brand with a positive failure rate, even though defect-free units can be produced at no additional cost. For example, by producing defect-prone units, the seller creates an inventory demand that would be absent if the units never failed.⁵⁷ Although this strategy clearly lowers the expected utility for risk-averse buyers and is more costly to the seller, demand, and hence profits, may rise. Similarly, Salop has shown that a firm with market

⁵⁴ Dennis E. Smallwood & John Conlisk, *Product Quality in Markets Where Consumers Are Imperfectly Informed*, 93 Q. J. Econ. 1 (1979).

⁵⁵ A. Michael Spence, *Job Market Signaling*, 87 Q. J. Econ. 355 (1973).

⁵⁶ Michael Rothschild & Joseph E. Stiglitz, *Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information*, 90 Q. J. Econ. 630 (1976).

⁵⁷ Geoffrey M. Heal, *The Demand for Products of Uncertain Quality*, in *Equilibrium and Disequilibrium in Economic Theory* (G. Schwodiauer ed. 1976). In the simplest model, the quantity demanded is given by the equality of expected *marginal* utility and price. If a consumer purchases x units and a proportion $(1 - a)$ fails with probability q , demand is given by $p = aqu'(ax) + (1 - q)u'(x)$. Differentiating, one finds that it is easy to show demand may rise with the defect rate, according to the degree of relative risk aversion.

power may contrive either price or quality dispersion in order to price-discriminate against consumers with less information or reduced ability to discover the better value.⁵⁸ For example, supermarket coupons discriminate against those consumers who are unwilling to search the newspapers for coupons.

Moreover, once the existence of firms with market power is admitted into the analysis, additional complexity occurs. As a general matter, imperfectly competitive sellers may provide either too much or too little product information, according to the particular type of information, the market structure of the industry, and the distribution of consumer preferences.⁵⁹ Efficiency in the information market requires equality between the expected marginal social benefits and marginal cost of information gathering or information provision—where the marginal social benefit of the information includes the increment to consumer surplus plus the gain in sellers' net revenues.⁶⁰ In contrast, profit-maximizing sellers will provide presale information up to the point where marginal net revenue equals the marginal cost of providing the information. Thus, it follows that sellers provide too little information if the marginal social benefit exceeds the marginal net revenue, and vice versa. Unfortunately, this comparison depends on a number of conflicting economic forces.

On the one hand, we have a generalization of the free-rider analysis of generic product information discussed earlier. A tendency for inefficient information undersupply results when the seller providing information does not capture (as additional profit) the entire social benefit of that additional knowledge. This may occur as follows: The information provider does not reckon as a benefit to itself the additional profits obtained by other firms or, for that matter, the additional consumer surplus accruing to consumers as a result of the information. It counts as a benefit only its own additional profits. From its point of view, the others are free riding on its efforts. Yet these gains are social economic benefits that should be counted from the point of view of society. In that the provider does not count them as a benefit to be balanced against the cost of providing the information, it will supply less than the socially efficient level.

⁵⁸ Steven Salop, *The Noisy Monopolist: Imperfect Information, Price Dispersion, and Price Discrimination*, 44 *Rev. Econ. Stud.* 393 (1977).

⁵⁹ For a more technical exposition of those points, see A. Michael Spence, *Product Differentiation and Welfare*, 66 *Am. Econ. Rev.* 407 (Papers & Proceedings, May 1976); Gerard R. Butters, *Equilibrium Distributions of Sales and Advertising Prices*, 44 *Rev. Econ. Stud.* 465 (1977); Eytan Sheshinski, *Price, Quality, and Quantity Regulation in Monopoly Situations*, 43 *Economica* 127 (1976); Avinash Dixit, *Quality and Quantity Competition*, 46 *Rev. Econ. Stud.* 587 (1979).

⁶⁰ Net revenue is gross revenue from sales less production costs.

On the other hand, there are other forces that may lead to a nonoptimal oversupply of information. In contrast to the previous analysis, brand-specific information will typically increase the market share of the provider at the expense of competing brands; that is, advertising diverts customers. However, if competitors have some degree of market power, these lost sales represent a net revenue loss to them. Turning the previous analysis around, the seller who provides information does not count these losses to its competitors as a loss to itself; yet they represent losses to society in the social benefit calculation. If these losses to competitors exceed uncaptured gains in consumer surplus (that the information providers also ignore), the result is an overprovision of information. This is not simply a theoretical curiosity. Consumers will switch brands for even an infinitesimal gain in surplus. Assuming that all sellers have identical costs and prices, the profit gain to one seller of a brand just equals the loss from that switch to another. Thus, the social value of the information is simply the infinitesimal consumer gain. Yet, as shown earlier, a seller will provide information as long as his cost does not exceed his own net revenue gain, which may easily swamp the gain to consumers. Thus, under these assumptions, an oversupply of information results. Unfortunately, quantitative analysis comparing the profit-maximizing level of information to the optimal (to determine the direction of the net effect) is very difficult in practice.

Finally, in an imperfectly competitive product market, sellers' incentives to supply brand information may result in an imperfect provision of product variety. Information that induces product differentiation may raise prices in equilibrium by more or less than the social value. This is a simple extension of the well-established result that monopolistically competitive industries do not generally provide the optimal degree of variety. However, this result is strengthened if it is imperfect information itself that leads to imperfect competition. The analysis of the provision of variety is identical with the previous analysis of information provision.⁶¹ Unfortunately, as alluded to earlier, rigorous measurement of optimal variety is still beyond the scope of quantitative economic analysis.

B. Product Market Failures and Institutions

Information problems may also prevent the underlying *product* markets from working properly in various ways. First, if consumers are imper-

⁶¹ For the general results, see Spence, *supra* note 59. For the extension to imperfect information, see Steven Salop, *Second Best Policies with Imperfect Information: How Information Can Lower Welfare* (unpublished manuscript, at Univ. of Pennsylvania, Dep't of Econ. 1978).

fectly informed, even small sellers can achieve a degree of *informational market power* over price, leading to monopolistic rather than perfect competition.⁶² For example, because the bereaved cannot easily shop among funeral homes, the industry is fragmented (each seller averages only 100 funerals per year), and prices are high.⁶³ The same is true where bans on professional advertising have prevented consumers from comparing prescription drug or eyeglasses prices. If information is poor, price dispersion for identical products also occurs, even in unconcentrated markets.⁶⁴ Similarly, poor information about the quality of competing brands may lead to spurious product differentiation and reputation premiums, raising prices for some or all functionally equivalent brands.⁶⁵

Taking a more general equilibrium view, the marketplace responds by channeling competition toward more easily observable product attributes and signals of unobservable product characteristics. By generalizing the concept of the "lemons" equilibrium,⁶⁶ we can show that, if price is more easily observed than quality, competition may be skewed toward less expensive, lower-quality products.⁶⁷ If consumers cannot easily obtain

⁶² Tibor Scitovsky, *Ignorance as a Source of Oligopoly Power*, 40 *Am. Econ. Rev.* 48 (1950); Peter A. Diamond, *A Model of Price Adjustment*, 3 *J. Econ. Theory* 156 (1971). For a model in which perfectly free entry leads to perfect competition despite imperfect information, see Jeffrey M. Perloff & Steven Salop, *Firm Specific Information, Product Differentiation, and Industry Equilibrium* (unpublished manuscript, at Univ. of Pennsylvania, Dep't of Econ. 1980).

⁶³ FTC, *Staff Report on Funeral Homes* (1978).

⁶⁴ Steven Salop & Joseph Stiglitz, *Bargains and Ripoffs: A Model of Monopolistically Competitive Price Dispersion*, 44 *Rev. Econ. Stud.* 493 (1977); Louis L. Wilde & Alan Schwartz, *Equilibrium Comparison Shopping*, 46 *Rev. Econ. Stud.* 543 (1979).

⁶⁵ An example of spurious product differentiation is the false inference that one aspirin brand is superior to another after it relieves a mild headache and the other brand does not relieve a more serious one. Such spurious product differentiation has been suggested by a number of writers, including Edward Chamberlin and John Kenneth Galbraith, with respect to a wide variety of consumer products such as beer, detergents, lemon juice, and even soft drinks. The experimental evidence on this point is provocative, although hardly definitive. Blind taste tests do not replicate market shares; in addition, they vary according to whether products are labeled with brand names. See Tucker, *The Development of Brand Loyalty*, 1 *J. Marketing Research* 32 (1964); McConnell, *The Development of Brand Loyalty: An Experimental Study*, 5 *J. Marketing Research* 13 (1968); Morris & Bronson, *The Chaos of Competition Indicated by Consumer Reports*, 6 *J. Marketing Research* 26 (1969); Kent B. Monroe, *The Influence of Price Differences and Brand Familiarity on Brand Preferences*, 3 *J. Consumer Research* 42 (1976). Richard Craswell, *Trademarks, Consumer Information, and Barriers to Competition* (FTC Policy Planning Issues Paper 1979), discusses some of the policy implications of this phenomenon.

⁶⁶ George A. Akerlof, *The Market for "Lemons": Qualitative Uncertainty and the Market Mechanism*, 84 *Q. J. Econ.* 488 (1970).

⁶⁷ Although this proposition is intuitively appealing, the generality of the effect has never been demonstrated. It appears to depend on the degree of relative risk aversion. Compare note 57 *supra*.

information about a product's safety (but can easily observe its price), price competition may reward those who cut their price by offering a less safe product. The same is true if consumers would prefer to pay extra for added warranty protection or for some other favorable contract terms, but the difficulty of comparing competing contracts prevents consumers from distinguishing those who offer such terms from those who do not. Many traditional consumer protection problems—unsafe products, defective or poor-quality services, or “unconscionable” contract terms—may be the result of such lemons competition.

If some cases, consumers may be able to rely on other, more observable attributes as signals of the desired attributes. However, this may simply shift sellers' competition into production of the signal, thus further distorting the product market.⁶⁸ If experience suggests that a used car's exterior condition is a good signal for its mechanical condition, for example, cleaner cars will sell at a premium. As a result, sellers will be induced to overinvest in exterior condition to exploit the signal, possibly even destroying its predictive value in the process.⁶⁹ In other markets, if the lemons competition has led consumers to learn that low price may signal low quality, consumers may respond by taking high price to be a guide to higher quality, thus weakening the incentives for price competition.

To some extent, contractual terms such as warranties or money-back guarantees may substitute for presale information and alleviate these problems. In effect, they (partially) indemnify the buyer against the possibility that his lack of information will have led him to make a wrong choice—and a seller's willingness to offer such protection may itself serve as a signal of that seller's product's quality, since warranties are cheaper to provide if product failures seldom occur. Not only does this introduce another “attribute” of the product (that is, the contract terms) about which consumers may not be adequately informed, but other problems may also prevent these contractual allocations of risk from optimally serving these functions. A buyer and a seller in a transaction both have an interest in designing incentive-compatible warranties that both induce efficient failure-prevention activities and allocate risk according to the parties' relative willingness to bear those risks. However, this desire for incentive compatibility generally conflicts with the parties' demand for insurance against various risks, thus limiting their ability to shed as much risk as they may like. At the same time, the potential for buyers' behavior

⁶⁸ This is sometimes an adverse side effect of governmental licensing programs. Sellers will invest in the skills necessary to obtain certification, not those that produce high quality. Thus, if licensing standards do not perfectly measure quality attributes, a signaling distortion will result.

⁶⁹ FTC, Staff Report on Used Motor Vehicles (1978).

to increase the likelihood of product failure (moral hazard) and for the existence of a warranty to attract careless buyers (adverse selection) may also limit the amount of risk sellers can efficiently assume. In extreme cases, these may eliminate the availability of warranties entirely, if no satisfactory way can be designed to overcome the problems.⁷⁰

Similarly, warranties are costly to enforce. Even if there is no need to litigate the dispute, the product often must be returned to the seller for the private remedy of repair, replacement, or refund. As a result, buyers often will not find it in their interest to pursue small claims. If enforcement costs are sufficiently high, due either to seller recalcitrance or simply to the necessary costs of transacting, warranty protections will be virtually worthless. And if buyers are aware of these costs and the limitations they place on effective protection, they will discount the value of the warranty accordingly, thus reducing consumers' demand for such protection and limiting the degree of protection offered in the market.⁷¹

It should be apparent from this survey that virtually no consumer product market or associated information market meets the textbook ideal of perfect information and perfect competition. As long as information is not perfectly free or products perfectly simple, there are almost certain to be some forms of market imperfections present. This does not imply that government intervention is always warranted to correct every instance of incomplete information in the marketplace or every market failure discovered. Given the difficulties of separating imperfections from the fact that information is costly, intervention must be limited to those instances in which information imperfections demonstrably lead to significant consumer injury and which can be corrected in a cost-effective manner—without creating serious distortions or side effects which lead to even greater injury. While it may sometimes be difficult to determine which instances of incomplete information pass this test, it is likely to be even more costly to ignore these issues and attempt to provide consumers with complete information. Policymakers must have adequate information for decision making and carefully weigh the benefits and costs of proposed intervention strategies.

In short, the key focus in any information case will necessarily be on the remedy being considered and on its effect on the larger information environment. This section has surveyed the economic literature regarding the interaction of information and product markets to provide a

⁷⁰ These issues are discussed in detail in *Post-Purchase Consumer Remedies* (FTC Staff Report, 1980).

⁷¹ Sellers may, of course, limit this problem by maintaining a reputation for good warranty service, precommitting to an independent dispute resolution mechanism or absorbing the enforcement costs ("double your money back").

framework for understanding the effects of interventions into those markets. The following section builds on this understanding by analyzing the effectiveness of specific information remedies.

III. INFORMATION REMEDIES

Most government information remedies are attempts to respond to one of these problems in the consumer information market.⁷² However, it should be noted that information remedies are not the only possible response to these problems. A more common regulatory response has been to attempt to correct the resulting failure in the product market by setting product standards or by directly regulating the production process or the terms of trade. Bans on untested drugs, automobile fuel economy standards, and judicial refusals to enforce certain harsh contract clauses—all can be viewed as attempts to correct, by direct regulation, market performances that may well be due to deficiencies in buyers' information.

The focus on information remedies in this paper reflects the belief that, where inefficient outcomes are the result of inadequate consumer information, information remedies will usually be the preferable solution. Remedies which simply adjust the information available to consumers still leave consumers free to make their own choices, thus introducing less rigidity into the market. Such remedies leave the market free to respond as consumer preferences and production technologies change over time. For the same reason, information remedies pose less risk of serious harm if the regulator turns out to have been mistaken. For example, if consumers are not really interested in increasing the quality or safety of certain product attributes, an information remedy will not force the market to make an inefficient change (where a mandatory product standard would). Similarly, information remedies allow different consumers to strike different balances between price and product quality, while direct quality regulation almost necessarily imposes a single choice on all consumers.

In short, information remedies allow consumers to protect themselves according to personal preferences rather than place on regulators the difficult task of compromising diverse preferences with a common standard. At the same time, information remedies place the burden of

⁷² Information remedies designed to achieve other social goals (that is, other than correcting the market's performance in offering the mix of goods and services most desired by consumers) are beyond the scope of this paper. Compare *Linmark Associates, Inc., v. Township of Willingsboro*, 431 U.S. 85 (1977) (bans on "for sale" signs in order to delay social changes in residential neighborhoods); *Central Hudson Gas & Elec. Corp. v. Public Service Comm'n* 100 S. Ct. 2343 (1980) (restrictions on advertising of electricity intended to reduce energy consumption).

enforcement of quality on informed consumers in conjunction with marketplace forces. This is often a more efficient enforcement mechanism, since consumers are constantly monitoring quality in the course of their market search, thus relieving regulators of this task. Firms then self-enforce their own compliance out of competition-induced profit motives rather than from the fear of government compliance actions.

However, remedying deficiencies in the information market is in some ways a more complex and subtle task than regulating product markets directly. While the goal can be stated simply—to improve the kind and quantity of information available to consumers—the technologies involved in producing that effect are still not very well understood.⁷³ This section examines those technologies and attempts to suggest ways in which consumer information remedies might be improved. For this purpose, information remedies can be classed into three general categories: (a) removing restraints on information; (b) correcting misleading information; and (c) encouraging additional information.

A. Removing Information Restraints

Perhaps the information remedy most compatible with the interests of individual sellers (if not their collective interest) is the removal of private or governmental restraints on the free flow of information. Such restrictions often tend to inhibit competition, with consequent efficiency losses.

Most notorious of the restraints on the flow of information are bans on advertising by professionals. While outright bans have been eliminated in most cases, many restrictions remain. Lawyers, for example, cannot use broadcast media in many states, and in all states they cannot seek out potential clients and say in person what they are free to say in advertising.⁷⁴ It is clear that bans on advertising impair competition by preventing firms with an advantage from conveying that fact and thereby expanding.⁷⁵ It should be equally clear that restrictions which prevent choice of

⁷³ In Finland, the government established two different health warnings, based on tar content. High-tar cigarettes are labeled "extremely harmful," while those with less tar are labeled "harmful." To avoid the extremely harmful label, many manufacturers have reduced tar content. While differentiated warnings are compatible with sellers' incentives, the Finnish government also banned tobacco advertising, thus making it harder for sellers of low-tar cigarettes to communicate their advantage to consumers. As a result, low-tar cigarettes have only 8–9 per cent of the market, compared with 30 per cent for such brands in Sweden. *Advertising Age*, Sept. 22, 1980, at 80.

⁷⁴ While it is admittedly more difficult to police in-person solicitation to prevent abuses, less restrictive solutions (such as cooling-off rules) are available.

⁷⁵ See Lee Benham, *The Effect of Advertising on the Prices of Eyeglasses*, 15 *J. Law & Econ.* 337 (1972); John F. Cady, *Restricted Advertising and Competition: The Case of Prescription Drugs* (Am. Enterprise Inst. 1976); T. J. Muris & F. S. McChesney, *Advertis-*

the most efficient medium for conveying that information have the same effect. If professionals are compelled to use only inefficient media, the costs of conveying information are increased and, as a result, less information will be conveyed.

Restrictions on the flow of information may also be imposed by private information producers. A professional who sells both diagnosis of a problem and treatments for it may refuse to sell the diagnosis separately, thereby compelling consumers to purchase necessary treatments from him.⁷⁶ While the joint provision of diagnosis and treatment is often efficient, it is often inexpensive to give consumers the right to purchase diagnostic information and use that information to shop elsewhere to purchase the necessary repairs or treatment. Thus, consumers might be given a right to obtain X-rays or auto repair work sheets or similar diagnostic information. In cases where there are significant efficiency gains from joint provision of diagnosis and treatment, the right would seldom be exercised. But, where significant efficiencies are lacking or where those efficiencies are outweighed by the risk of fraudulent diagnosis, consumers would be free to separate diagnosis and treatment if they so chose.

Third parties who provide only information may also restrict the uses of their information by using their copyright protection. For example, *Consumer Reports* actively seeks to prevent retailers and manufacturers from using its ratings as sales aids.⁷⁷ Undoubtedly, the market impact of those ratings would be greater if highly rated firms could convey that fact to consumers in advertising. However, this would require a shift in the strategy for selling the information, selling the right to use it to firms instead of (or in addition to) selling the ratings themselves to consumers.⁷⁸ Conceivably, this could reduce the perceived credibility of the information (since consumers also lack information about *Consumer Reports'* accuracy) at the same time it made the information available to a larger number of consumers.

ing, Consumer Welfare, and the Quality of Legal Services: The Case of Legal Clinics (Working Paper No. 78-5, Univ. of Miami, Law & Econ. Center, 1978); R. S. Bond, J. E. Kwoka, J. J. Phelan, & I. T. Whitten, Effects of Restrictions on Advertising and Commercial Practice in the Professions: The Case of Optometry (FTC Staff Report, Bureau of Economics, Sept. 1980).

⁷⁶ One reason for such a refusal might be the possibility of fraudulently diagnosing a need for unnecessary repair services. See text and note 48 *supra*.

⁷⁷ See *Consumers Union v. Theodore Hamm Brewing Co.*, 314 F. Supp. 697 (D. Conn. 1970).

⁷⁸ This strategy may also reduce the disparity between the private and social gains from such information, since affected firms internalize some of the benefits of the information. See Howard Beales & Steven Salop, Selling Consumer Information, in 7 *Advances in Consumer Research* 238-40 (Jerry Olson ed. 1980).

Finally, trademarks may also impede the flow of information when they take on generic meanings. When Aspirin or Linoleum was a trademark, its status as such prevented firms not holding the right to the trademark from using what might have been the only word that simply and adequately described their product. Moreover, no one competitor may have sufficient incentive to challenge a trademark, since a successful challenge would make the mark available to all competing firms. In such cases, trademark dedication by the government may be an appropriate remedial approach. Where there are good substitute names which are not trademarked, however, the exclusive right to the trademarked word is not likely to be as serious a barrier, and the benefits from such an action are likely to be quite small.⁷⁹

B. Prohibiting Misleading Claims

Remedies which prohibit misleading claims, unlike the other remedies discussed here, work by *reducing* the amount of information available to consumers. The rationale for such remedies, obviously, is that misleading claims do more harm than good, and that consumers are therefore made better off by their prohibition. However, because such prohibitions do work to restrict the information communicated to consumers, the prohibitions should be treated with some care.

Careful analysis is particularly important because prohibiting misleading claims is not nearly as simple a matter as might appear at first glance. Section I has already discussed the difficulties involved in determining when an advertisement has made a "claim," and whether it is possible to draw any useful distinction between the advertisement's claim and the consumers' beliefs concerning the advertised product.⁸⁰ In addition, even when it is clear what the advertisement is claiming (and that the claim is believed by consumers), defining "truth" is also a far from trivial issue.

This latter problem arises because it is often impossible to determine with certainty whether a given claim is true or false. On technical aspects of product performance, for example, it is usually impossible to predict performance beyond any shadow of a doubt. All that can be done is establish that the claimed performance level is likely with some probability. Moreover, for most claims, an array of tests are available, each of which sheds varying degrees of light on this probability. Such tests are costly, though, and the most precise tests (that is, those which leave the least uncertainty about the claim's truth or falsity) are usually the

⁷⁹ See Craswell, *supra* note 65, at 51-56.

⁸⁰ See text at notes 22-41 *supra*.

most expensive to conduct. Given this cost of testing, requiring perfect certainty may not be cost-effective, even if it is technically feasible. The question which then arises is: What probability of truth should be required if a claim is not to be considered misleading?

Under current law, this issue is typically addressed under the heading of *advertising substantiation*. The doctrine laid down by the FTC and the federal appellate courts is that advertisements are deemed deceptive if the probability that a claim is true is not sufficiently high to constitute a "reasonable basis" for that claim.⁸¹ Claims which lack such a reasonable basis are generally prohibited.⁸² However, this standard merely changes the terms of the inquiry from "What probability of truth ought to be required?" to "What probability of truth would be *reasonable*?" If the goal is to require the socially optimal probability of truth by ensuring that the optimal level of testing is actually performed, these two inquiries are identical. However, actually defining the level of testing that would be optimal in any given case is an extremely complex matter, as the following analysis will demonstrate.⁸³

Consider an advertising claim which in fact is either true or false. As a first approximation, the value of testing to any individual consumer depends on three factors: (1) the net benefits of using the product if it performs as advertised; (2) the net costs of consuming it if it does not; and (3) the consumer's *a priori* estimate of the likelihood of each of these two outcomes. For example, suppose that a consumer is agnostic in his prior assumption about the truth of the claim, believing (in the absence of

⁸¹ See, for example, *Porter & Dietsch, Inc.*, 90 F.T.C. 770, 866 (1977), *aff'd*, 605 F.2d 294 (7th Cir. 1979), *cert. denied*, 100 S. Ct. 1597 (1980); *Pfizer, Inc.*, 81 F.T.C. 23, 60-73 (1972). Current law also requires advertisers to test all claims in advance of making them, as only those tests which have been conducted at the time the claim is made are considered in determining whether the advertiser had a reasonable basis. This aspect of the substantiation doctrine will not be discussed here.

⁸² But compare *National Comm'n on Egg Nutrition*, 88 F.T.C. 89 (1976), *aff'd*, 570 F.2d 157 (7th Cir. 1977), *cert. denied*, 439 U.S. 821 (1978) (permitting an advertiser to continue claiming that there is no relationship between dietary cholesterol and heart disease, as long as it also discloses that some scientific evidence contradicts this claim). The advertiser may also be able to escape prohibition by narrowing the claim to one that can be supported on the basis of the tests that have been conducted. For example, while a survey of doctors on a drug company's payroll would not constitute a reasonable basis for the claim, "Three out of four doctors prefer our drug," it could be a reasonable basis for the narrower claim, "Three out of four doctors *on our payroll* prefer our drug." However, even this statement might be construed as making an implied claim that doctors in general find the drug superior, unless the advertiser is careful to avoid giving consumers that impression.

⁸³ For a technical introduction to the approach to the value of testing taken here, see Raiffa, note 40 *supra*. For a specific application, see Evan R. Kwerel, *Economic Welfare and the Production of Information by a Monopolist: The Case of Drug Testing*, 11 *Bell J. Econ.* 505 (1980).

further information) that there is a 50 per cent probability that the claim is true and a 50 per cent probability that it is false.⁸⁴ If no further testing is done, such a consumer will maximize his expected benefits by purchasing the product only when the benefits of consumption if the claim is true exceed the costs of consumption when it is not. However, further testing of the claim allows the consumer to improve his *a priori* estimate of the claim's truth, thereby permitting finer decisions. If the tests show an increased probability that the claim is true (that is, an increase over the *a priori* estimate), then the consumer can purchase even when the benefits if the claim is true are relatively low or the costs if the claim is false are relatively high. If the tests show an increased probability that the claim is false, the converse is true. In short, testing is valuable because of the chance that it will improve the consumer's purchase decision from that which would be made on the basis of the consumer's *a priori* estimate.

Of course, testing will not always be sufficiently valuable to be justified, especially once a fourth factor—the cost of the tests—is taken into account. For example, if the consumer is dubious in his prior assumption about the truth of a claim but the benefits of consumption when the claim is true are extremely high relative to the costs when it is false, then only an extremely accurate test could conceivably change the consumer's purchase decision (and, even then, only if the product fails the test). Because more accurate tests are also more expensive, however, it may be cheaper on balance simply to take the risk that the claim may be false and save the costs of testing. In general, further testing will be cost-effective only when the test is sufficiently precise that its outcome may change the decision to buy or not to buy but sufficiently inexpensive that the costs of testing do not exceed the expected value of the benefits to be gained by this correction.

While the analysis so far has examined the value of testing to an individual consumer, the same considerations apply to testing decisions for consumers in the aggregate. The benefits of testing depend on the possibility that the information revealed by the test will change (some) consumers' purchase decisions, but tests must also be sufficiently cheap that the testing costs do not exhaust the potential savings. Aggregating consumers' testing decisions does shift the optimum in the direction of a higher level of testing, since the costs of testing remain the same while the

⁸⁴ The analysis is more complex if the claim is about an attribute whose benefits (or costs) vary over a continuous range, because the probability of each possible value is then relevant. For example, the benefits of purchasing a car which claims to get twenty-five miles per gallon will depend on the probability that it gets twenty-four miles, twenty-five miles, twenty-six miles, and so on. The direction of the effects remains the same in either case, however.

benefits are shared by a larger number of consumers. Like any consumer information, testing has public good aspects, in that once a test is conducted, its results can be disseminated publicly without the test's having to be repeated for each consumer.⁸⁵ However, this introduces a fifth element into the optimal testing calculus—that is, the number of consumers who see the advertiser's claim and thus could potentially benefit from an improved estimate of the probability that the claim is true.

Of course, the parameters that determine the optimal level of testing—the potential gains and losses from purchasing, the costs of testing, the number of consumers who receive the claim, and their prior estimates of the claim's truth⁸⁶—will almost certainly vary from product to product and from claim to claim. It is thus unlikely that there will be a single level of testing which it will be optimal to require in all circumstances. Because consumers differ in their prior expectations, relative degrees of risk aversion, and potential gains and losses from consumption, the optimal amount of testing may also be different for each consumer.⁸⁷ As a result, decisions about how much testing is adequate must be made on a case-by-case basis. What constitutes a reasonable basis for one claim may be either inadequate or excessive for another.

In particular, the potential gains and losses from purchasing the product will depend heavily on whether consumers can verify the truth of a claim prior to their purchase (or even after the purchase, if the product is purchased frequently). The potential for repeat purchases implies that the benefits if the product performs as advertised are high relative to the costs if it does not, since the benefits will be capitalized over the stream of future purchases while the costs will be incurred only once.⁸⁸ Even in this extreme case, some level of testing by the seller could still be beneficial,

⁸⁵ This benefit is shared only by consumers who act on a particular seller's claim, so some of the benefits can be internalized if each seller tests his own claims and includes the costs of testing in the price of the product. However, this will not capture the benefits to those consumers who choose *not* to buy the product on the basis of the test results.

⁸⁶ For example, claims for baldness cures and perpetual motion machines might well be viewed with increased skepticism by many consumers. Analysis of this case is considerably more complex, because one's *a priori* estimate of a claim's truth affects not only the extent to which the claim will be relied on but also the expected probability that the claim will pass or fail any given test.

⁸⁷ In addition, the truth of the claim itself may also vary across consumers. For example, a claim that a supermarket has the "lowest prices in town" may depend on the mix of products the consumer purchases and thus may be true for some consumers but not for others.

⁸⁸ Consumers' ability to verify the accuracy of a claim may also affect the *a priori* estimate of the probability that the claim is true. Inaccurate claims which consumers can verify on their own are not likely to persist very long, so most persistent claims about such attributes are likely to be accurate. Compare Nelson, note 53 *supra*.

since it would allow the verification to be conducted once rather than separately by each individual consumer. In general, though, the optimal level of testing will be highest for infrequently purchased products and claims about unobservable attributes.

The analysis cannot stop here, however, for it must also consider the effect of the testing requirement on the number of testable claims that are made. If the costs of testing are borne by the advertiser (as under current law), increases in the required level of testing will increase the cost of any advertising claim whose truth can be subjected to objective tests, thus giving firms an incentive to avoid such claims. The exact effect of testing requirements will depend on the relative costs of substantiating different kinds of claims and on the relative benefits of those claims to the firm making them. If "puffery" and other subjective claims (that is, those which cannot even be tested) are perfect substitutes for objectively testable claims as far as the advertiser is concerned, then any testing requirement will induce firms to completely abandon the testable claims. The exact rate of substitution is, of course, an empirical question, but high rates of substitution will tend to reduce the optimal level of testing. When substitution of claims does occur, consumers lose not only the value of the specific information which is no longer provided but also the benefits of competition on that product attribute which the claim may have induced.

Finally, the analysis has not yet considered the appropriate remedy for claims which are found to lack a reasonable basis. As noted earlier, current law prohibits such claims. The major drawback to this is that even claims which have not passed the level of testing that is optimal for some or most consumers may still convey useful information to others. In some cases, it may be more efficient to allow the claim to continue but require the advertiser to disclose that the claim is only probably true or the type of testing that has been done to support the claim.⁸⁹ On the other hand, such disclosures will typically involve complex scientific information, and the costs of effectively communicating that information may often exceed the cost of simply prohibiting the claim. And given that each of these remedies has positive costs, it may sometimes be the case that the most efficient solution is simply to let the unsubstantiated claim continue. To put it another way, the optimal level of testing will also depend on the costs of correcting the claim should the product fail the test.

⁸⁹ See National Comm'n on Egg Nutrition, note 82 *supra*. Indeed, if all sellers were to disclose the level of testing they had done, consumers could then choose the seller whose level of testing most corresponded to that consumer's optimum. In principle, this would allow competition to determine the optimal level of testing for each claim, rather than having that level set by government fiat.

This trade-off between the costs of prohibiting a claim and the costs of additional disclosures is hardly unique to claims which lack a reasonable basis. The same issue is inherent in many deception cases. While a given statement may convey a false claim to some consumers, the same statement may convey useful information to other consumers who interpret the statement differently. Prohibiting the advertiser's statement, though it may stop some consumers from drawing a false inference, may also deprive the other consumers of the useful information that they received. This reduction in the amount of truthful information must be counted as a cost of the prohibition.

In many cases, this cost can be minimized by requiring the statement to be reformulated or adding a qualification or additional disclosure which protects those consumers who might have misinterpreted the claim, while preserving the truthful information received by those who interpreted the claim correctly.⁹⁰ Indeed, when some consumers' mistakes cannot be traced to any specific statement of the advertisers but are instead caused by what the advertiser neglected to say, the disclosure of additional information will be the only possible remedy.⁹¹ However, additional disclosures also involve costs, since no information can be communicated costlessly to consumers. In general, the existence of such costs reduces the number of cases in which it is efficient to try to correct questionable advertisements even when it is known that consumers are misled. The last part of this section thus considers the specific costs involved in communicating additional information to consumers and analyzes methods by which those costs might be reduced.

C. *Increasing Consumer Information*

Most common are remedies designed to increase consumers' information about competing products. As discussed above, the disclosure of additional information may often be the most efficient remedy for correcting advertising claims that generate inaccurate consumer expectations. And when consumers' ignorance or inaccurate expectations cannot

⁹⁰ Thus, some commentators have suggested that an advertisement should not even be considered deceptive unless some disclosure or reformulation of the claim exists that would reduce the number of mistaken consumers without affecting at all the number who receive the truthful information conveyed by the same advertisement. See Russo *et al.*, *supra* note 30.

⁹¹ The same is true of cases in which consumers will continue to hold an inaccurate belief even after the claim which gave rise to that belief has been eliminated from the seller's advertising. Compare Warner-Lambert Co. v. FTC, 562 F.2d 749 (D.C. Cir. 1977), *cert. denied*, 435 U.S. 950 (1978) (requiring the advertiser to correct the lingering effects of past deception).

be traced to any particular advertising claims—that is, when consumers would have been as misinformed (or more so) had they had not seen any advertisements—then there will be no “false” claims to ban, and increasing consumers’ information will be the only possible remedy. In some cases, this increased information may be generated simply by removing some restraint on the flow of information, as discussed earlier. Otherwise, the only alternative is to (somehow) affirmatively increase the amount of information available to consumers.

Traditionally, this has usually taken the form of a requirement that sellers disclose certain standardized information to consumers. Cigarette manufacturers are required to disclose on packages and in advertising the general warning that smoking may be hazardous to health; automobile manufacturers are required to disclose a standard miles per gallon rating (as well as the fact that actual mileage may differ depending on individual driving habits); light bulb manufacturers are required to disclose the bulb’s average light output as measured in lumens.⁹² This form of required disclosure is not the only method of increasing consumer information. Two additional methods which are also considered are: (a) stopping at the establishment of a standardized scoring system for measuring product attributes; and (b) consumer education efforts. Depending on the circumstances, any of these three techniques (or some combination of them) may represent the most efficient remedy.

Before discussing these specific techniques, however, we should note one general point. Consumers’ information will always be incomplete to some extent, as perfect or total information would cost far more to obtain than it would be worth. Thus, it is difficult to lay down the exact steps that should be taken to affirmatively increase consumers’ information, beyond the general (and obvious) principle that information should not be generated beyond the point at which its marginal benefits equal its marginal costs. The difficulty of actually measuring these benefits and costs does not mean that the disclosure of information should never be ordered; it does mean that legislators and regulators should be sensitive to the dangers of striking an inappropriate balance. These dangers may be less serious with information remedies than with product standards or other, more restrictive forms of regulation, but they are real dangers nevertheless.

In particular, there is usually an advantage in designing disclosure remedies that leave as large a role as possible to normal market forces, to restrict the market as little as possible. The goal should be not to specify the exact information to be disclosed and the exact manner in which it will

⁹² See Incandescent Lamp (Light Bulb) Industry, 16 CFR § 409 (1980).

be disclosed but to give sellers the proper incentives to make these decisions on their own. This reduces the consequences of a bad decision by the government since it avoids forcing sellers to disclose information in an ineffective manner or to disclose information which, because of a change in circumstances, is no longer desired by consumers. It also increases the effectiveness of the remedy by harnessing sellers' own incentives to develop the most effective ways of informing consumers. Thus, innovation should be encouraged by leaving sellers latitude to experiment. The remainder of this section, in essence, considers ways that information remedies can be made most compatible with sellers' economic incentives.

1. *Establishing a Scoring System.* A scoring system measures the quantity of one or more product attributes across brands. The score may be dichotomous, as with a definition (for example, "walnut" means solid walnut, as opposed to veneer), or it may be continuous (for example, gasoline mileage ratings).

However devised, scoring systems are intended to reduce the costs of communicating about measured attributes. Before firms can compete for consumers on the basis of different amounts of some attribute, it is necessary for consumers to be able to observe the amount of the attribute in different products. When a scoring system provides a new measure where none existed previously, consumer comparisons (and hence competition) on the attribute become possible. Where the system substitutes a new, standardized measurement for a host of conflicting ones, the costs of comparing quantities of the attribute are also reduced, and competition on the basis of the attribute becomes easier.

Two factors may limit the emergence of scoring systems in the absence of government intervention. First, when an attribute is relatively complex, there frequently is no unambiguously best measure of it. As a result, nearly any measure can be challenged as false or misleading, at least by competitors. Since any system is likely to disadvantage some competitors, those firms will have an incentive to challenge it. Thus, firms may simply choose not to use it rather than bear the cost of defending their method.

Second, informational measures may be particularly vulnerable to deceptive usage. If cigarette "tar" measurements were not standardized, a manufacturer could generate a lower measured tar content for his cigarette by basing the measure on fewer or smaller puffs of smoke without being discovered by most consumers. In this sense, measurement is a credence good. Competing firms might counter by explaining the differences in the scores, but the firm that does must thereby bear costs for free-riding competitors. Because of this free-rider problem, a voluntary system may not be viable. Even if various measurements are not decep-

tive, the use of diverse systems can confuse consumers and reduce their understanding of any single system.⁹³ A scoring system is thus a public good in many respects. While this good can be privately supplied by a trade association or some other entity, it is nevertheless a collective one. Government is frequently an efficient mechanism for making decisions which are inherently collective.⁹⁴

Whether a new scoring system actually reduces the costs of communicating about an attribute depends on the costs of using it. The costs of scoring products are likely to increase with the precision of the measurement. At some level, the required precision may be so great that the new system may be too costly to be efficient. For example, the costs of actually having to determine the mileage for each individual automobile would surely make the cost of communicating about gasoline mileage prohibitive.

The decision to impose a new scoring system must also consider the possible side effects of that index in addition to the ongoing costs of testing products to calculate their scores. Side effects stem from the fact that inevitably only a few product attributes are scored. Because this eases the costs of communication about these attributes relative to others, the scoring system may increase the market's emphasis on them at the expense of the unscored attributes. Particularly where unmeasured attributes are related inversely to the measured ones, through either production technology or preferences, increased emphasis on a newly observable attribute may lead to inefficient reductions in others. Side effects may also result from consumer inferences about other attributes or other products not covered by the system. For example, microwave ovens carry a warning on the hazards of microwave radiation leakage. Gas ovens, however, carry no such warning. While they do not pose radiation hazards, there is some risk of gas leakage with the consequent possibility of asphyxiation or explosion. It is not clear which product has lower total risks. If consumers infer from the absence of a warning that radiation hazards are more significant than other (undisclosed) risks, they may be led to make incorrect purchasing decisions.⁹⁵

⁹³ For example, an FTC staff investigation found considerable confusion among consumers as to just what the word "natural" meant when applied to food. See FTC Staff Report, Proposed Trade Regulation Rule on Food Advertising 208-28 (September 1978).

⁹⁴ Moreover, the incentives of those who actually set private standards may lead to standards that differ from the social optimum—for example, by disfavoring new entrants. As a result, the process may be subject to significant abuses. See FTC Staff Report, Standards and Certification (December 1978).

⁹⁵ See Nina Cornell, Roger Noll, & Barry Weingast, Safety Regulation, in *Setting National Priorities: The Next Ten Years* 457 (Henry Owen & Charles L. Schultze eds.) (Brookings 1976). One microwave oven manufacturer, whose products do not carry the radiation warning, encourages the inference of greater safety in its advertising.

The scoring system may also influence consumer beliefs about the importance of various attributes, although it is difficult to generalize about the inferences consumers will make concerning omitted information. Few consumers will infer from the availability of a gasoline mileage score that other attributes of automobiles are irrelevant, but a system which measures only certain nutrients may well lead consumers to believe that other nutrients are unimportant. The most that can be said, in general, is that careful consideration must be given to the inferences consumers are likely to draw about unmeasured attributes. Unless such inferences are correct, the scoring system may be used as an inappropriate signal.

A related problem is that sellers have an incentive to exploit the signal whenever possible. A signal may then lose its information content as a result of the sellers' responses to it. For example, the standard scoring system for nutrient composition of foods is the recommended daily allowance (RDA). Because of our incomplete understanding of the role of some nutrients, no RDA has been established for some trace elements. Instead, the RDAs were devised on the assumption that, by obtaining the RDA of major nutrients from natural sources, we would also obtain sufficient amounts of trace elements.⁹⁶ However, manufacturers have responded by fortifying natural products with synthetic vitamins, so that the assumed relationship between major and trace nutrients may no longer hold. As a result, products which score well may not be the products which are most nutritious on balance.

One possible solution to this problem is to measure more attributes. However, there is inevitably a trade-off between the extensiveness of the scoring system and its comprehensibility to consumers. If too much information is provided, consumers may ignore it all. Comprehensibility can sometimes be preserved by combining measures of different attributes into an overall summary or index score of product quality.⁹⁷ However, the usual problems of index numbers are present whenever consumer preferences for the included attributes differ. Although an index score may be quite useful, it will nonetheless mislead some consumers. Moreover, to the extent that consumers rely on the index (at the expense of other data), sellers will seek to maximize their rating at minimum cost (namely, by improving only those attributes given the most weight in the index). As a result, the index may become less useful over time. Thus, index design must always consider the possible endogenous responses of producers. It must also consider the consumers' utilities of different attri-

⁹⁶ See Recommended Daily Allowances (National Academy of Sciences 1974).

⁹⁷ For a discussion of how the comprehensibility of information might be improved, see FTC Staff Report, Consumer Information Remedies 284-97 (1979).

butes and differences in measurement error and underlying variance across brands in arriving at appropriate index weights.⁹⁸

The communicability of a scoring system may also be improved by collapsing a complicated measurement into a set of discrete rank classes such as high, medium, and low. It may be easier to communicate the class rank than the underlying measurements, with the result that the market may be more likely to respond. This also reduces the danger that consumers will exaggerate the importance of insignificant differences in a continuous score. However, such schemes may also remove the incentive for marginal product improvements. Once a product qualifies for the highest rank, its producer has no incentive to make further improvements if consumers can observe only the class. Marginal improvements may be encouraged as producers of products that just miss the best class strive to reformulate to get into the best class, but the incentive to make further improvements is lacking.

Imposing an *exclusive* scoring system (and prohibiting the use of any other) may be unnecessary. It may suffice to require that the chosen system be used if any measurement is given but to permit the use of other measurements of the same attribute as well.⁹⁹ Such a scheme minimizes potential side effects because it allows the emergence of other measures if the required scoring system becomes distorted over time. However, this option may also allow sellers to prevent the emergence of any standard, thus defeating the purpose of supplying a standardized scoring system in the first place.

In general, then, the value of any scoring system depends on how much it improves information about the measured attribute, on the value of the attribute itself, and on the number of consumers who want the attribute. Scoring systems that do not significantly improve communication will

⁹⁸ One economic model for deriving the optimal index is the following. Assume utility is linear in two attributes, x_1 and x_2 , with marginal utilities a_1 and a_2 , respectively. Assume all consumers are identical. Assume that the standardized distributions of the attributes across brands are normal, with mean zero and variances s_1 and s_2 . Each attribute is measured with error, however, so that one observes $Y_i = x_i + u_i$, where u_i is also distributed normally with mean zero and variance Γ_i . Then expected utility from a particular brand, given the observed values of Y_1 , is given by $E(U | Y_1, Y_2) = a_1\rho_1 Y_1 + a_2\rho_2 Y_2$, where $\rho_i = s_i/(s_i + \Gamma_i)$. That is, attributes with greater measurement error or lower underlying variance across brands are given less weight. Intuitively, the greater the variance of u_i given x_i , the greater the amount of noise in the measurement relative to the signal. This formulation neglects endogenous changes in the variance of attributes across brands.

⁹⁹ For example, the FTC requires that, if high-fidelity power is discussed, a particular measure of power must be used. Power measurements differ depending on the point of the frequency distribution at which the measurement is made; the FTC specifies a particular point. However, firms are free to make measurements at other points as well, as long as they also use the FTC-specified measurements. See Power Output Claims for Amplifiers Utilized in Home Entertainment Products, 16 CFR § 432 (1980).

have little effect. Similarly, measurements of attributes which are of little value or demanded by few consumers will have little impact on the marketplace. Given the difficulties of determining demand in advance, it is likely that there will be many failures in introducing new systems. A new scoring system is in essence a new product, albeit an informational one. As with introduction of new products by firms, failures can be expected to be common. While a given failure implies that the particular scoring system should be abandoned, it does not imply that no new systems should be introduced.

2. *Required Disclosures.* Once a scoring system is available, it is tempting for governmental agencies to require that each brand's score be disclosed on product labels or in advertising. Disclosures may be *triggered* whenever a particular claim is made (for example, any claim about gas mileage triggers a requirement to disclose the EPA mileage estimate), or they may be *across-the-board* (for example, all cigarette advertisements must include a health warning).

The need for requiring disclosure, in general, depends on the completeness of the total information environment and sellers' incentives to disclose voluntarily. If information is readily available from another source, or if firms have their own incentives to disclose whenever disclosure would be useful, required disclosure is unnecessary.

Mandatory disclosure is least likely to be necessary for information that differentiates one brand from another. In such cases, the producer of the brand with an advantage has every incentive to convey that fact; if the standard score improves communication, it will be used. The advertiser is generally in a far better position than a court or governmental agency to decide on the appropriateness of using a particular bit of information to communicate a product's advantage because it has continuous feedback from sales data on the impact of the message. The advertiser is also in a better position to determine the most effective technique for communicating that information and to respond to changes in the optimal communication strategy over time.

Conversely, disclosure is most likely to be appropriate when information affects an entire product class without differentiating the brands within that class. In such cases, no one firm may have sufficient incentive to disclose the information on its own, whether the information is positive or negative. If the information is positive, the firm's competitors will share in the benefits as free riders. If the information is negative, it will reduce the sales of each firm, and thus no firm will have an incentive to convey it. Consequently, it is preferable to devise a scoring system in such a manner that what it conveys is brand-specific information rather than general, thus giving firms an incentive to disclose it voluntarily.

Required disclosures may also be appropriate when a new scoring system is first introduced. By requiring all firms to disclose their scores for a relatively brief period, consumers can develop a frame of reference for evaluating claims using the new score. Requiring the units of measurement to be defined (for example, “*R*-value is a measure of insulating ability”) may also be needed for a short period, until the measurement passes into general usage. When tar and nicotine numbers were first introduced, for example, consumers had little idea of what numbers were high and what numbers were low. Since all firms disclosed their scores, consumers developed an idea of the range and average. As the benefits of developing such a frame of reference are shared by all firms who score well, no one firm may have sufficient incentive to educate the public on its own.¹⁰⁰ Such disclosure requirements should be terminated after a relatively brief period, though, for once the reference is developed, there are only limited benefits from universal disclosure. Any firm with a particular advantage will find it profitable to convey its score and compare it with others voluntarily.

It should be emphasized that disclosures can help to develop a frame of reference only if the requirement applies across-the-board rather than being triggered by related claims. Because only firms that score well are likely to make related claims voluntarily, disclosure requirements triggered by such claims will not allow consumers to learn much about average values in the marketplace. Triggered disclosures may also have the perverse property of burdening the sellers whose products score the best as they are the ones most likely to make the triggering claims. As such, triggered disclosures may place these firms at a competitive disadvantage rather than the competitive advantage they deserve.

In contrast to merely establishing a scoring system, mandating disclosure of the scores may actually increase the cost of communicating. The required disclosure necessarily displaces other information which the advertiser would rather convey.¹⁰¹ The effects of disclosure requirements are thus equivalent to those of a tax imposed on advertising messages which is collected in kind and is irrespective of the product’s score. Moreover, the tax may be quite substantial, particularly for broadcast advertising. The average price of a thirty-second prime-time network television advertisement for the fall of 1980 was approximately \$90,000,

¹⁰⁰ The “best” product does not confront this problem since it can simply claim to be best.

¹⁰¹ Even if the disclosure displaces only empty space, as in a print advertisement, that empty space was there to facilitate effective communication of the advertisement’s message. Advertisers do not typically pay for blank space unless they think it serves a useful purpose.

implying an average cost in the neighborhood of \$3,000 per second.¹⁰² Since typical disclosures are approximately five or six seconds long, total costs of disclosures may be quite substantial.¹⁰³ This increases the cost of conveying the product message and thus leads to a reduction in the quantity of advertising. Firms will present their message less often or to smaller audiences or both, so fewer consumers will see and remember the message. Required disclosures thus may make it more costly for firms with an advantage to communicate that fact to consumers.

When disclosures are triggered by particular claims, the effect is somewhat different. Triggered disclosures increase the relative costs of those claims compared with others, giving advertisers an incentive to shift their advertising to other claims which are not subject to the disclosure requirement. The extent of substitution depends on the efficiency of alternative claims as sales tools and is clearly an empirical question for each case.

Disclosures also have an effect on the ability of the advertisement to communicate in addition to merely reducing the amount of time available for the message of the firm. Particularly in broadcast advertising, where the total message is necessarily short, it may be difficult to convey multiple (and possibly conflicting) messages in a single advertisement. If so, then consumers who see an advertisement may not remember it as well as a result of the disclosure. Since this increases the cost per actual message delivered, advertisers may purchase fewer advertisements, thus further reducing total communication of the claim. The magnitude of this effect is not known, however, and is likely to vary from case to case.

Given these risks, the effective communication of required disclosures must always be carefully considered. Although advertisers can be relied upon to deliver the disclosure message to the same target audience as the main message of the advertisement, they have an obvious incentive to

¹⁰² This figure is the time-weighted average of prices in each show and assumes an equal number of spots for sale per half-hour. This assumption is not correct, since "long-form" programming tends to have more commercial availabilities. Since the average price in a movie is \$90,700, the error from using this assumption appears to be insignificant. Data are from *Advertising Age*, Sept. 1, 1980, at 80. It could be argued that since advertising is sold predominantly in thirty-second spots, advertisers have little choice as to the length of spots. However, this figure is presumably a market response to the demands of most advertisers, and if significant numbers of advertisers preferred shorter spots, the market would have been offering them.

¹⁰³ An alternative estimate of the cost could be based on the number of words in the disclosure. An "average" thirty-second advertisement has approximately seventy words. Disclosures tend to have relatively more words than the five- to six-second length estimate would imply, since they can be read more rapidly than a typical advertisement. It seems more reasonable to base cost estimates on time consumed rather than number of words, since disclosures are usually less integrated with the video portion of the message.

minimize the effectiveness of any disclosure which reflects unfavorably on their products.¹⁰⁴ To complicate matters, the target audience for the disclosure may be different from the advertiser's marketing target, in which case the disclosure will be directed to the wrong audience.¹⁰⁵ Disclosures must also be consonant with the information-processing capabilities of the target audience and the limitations of the medium in which they are presented. When information is new, consumers are likely to need a frame of reference to evaluate it and perhaps an explanation of its significance and relevance. When the exact language of a disclosure is specified, as it often is, its effectiveness may decline over time because consumers learn to tune it out, a phenomenon known as "wear-out."¹⁰⁶

Clearly, writing effective advertising copy is a subtle and complex business. Legislatures and governmental agencies are generally inexperienced as it requires specialized skills and knowledge which public bodies seldom possess. As an alternative to mastering the art and science of producing effective communications, courts or agencies could impose standards of performance and leave the design of the most cost-effective message and media strategy to the affected firms. Although measurement of performance levels is a difficult task, advertisers do routinely measure consumer recall, awareness, and beliefs when evaluating advertising campaigns. A performance standard could specify that the target audience must receive some particular message—for example, that disclosures must continue until 60 per cent of mouthwash users are aware that mouthwashes do not cure colds—and leave the details of creative execution to firms subject to the requirement. Once the specified level had been achieved, firms could cease the disclosure, thereby receiving an incentive to minimize the costs of conveying the information. If numbers alone will not communicate effectively, for example, an advertiser might choose to compare its products with other products or with the average for a product class. Such choices will be guided by the incentives of the firm to communicate effectively and will draw on its expertise in communicating to its consumers.

When the government seeks to specify the information to be communicated, *it* must solve the problem of effective communication. Consumers

¹⁰⁴ Cigarette disclosures provide a vivid illustration of this point. The general health warning is usually buried in the advertisement, while the tar and nicotine figures are given great prominence by low-tar brands.

¹⁰⁵ Most commonly, the target audience for a disclosure is a subset of the advertiser's target. For example, warning information conveyed in advertising may be applicable only to a relatively small group. Different media strategies may reach such a group more efficiently.

¹⁰⁶ See C. Samuel Craig, Brian Sternthal, & Clark Leavitt, Advertising Wearout: An Experimental Analysis, 13 *J. Marketing Research* 365 (1976).

may need a frame of reference for new information to determine how different brands compare. They may find general descriptions more useful than specific numbers accurate to several decimal points—particularly in broadcast advertising. They may prefer changing message formats or methods of presentation over time. Clearly, if the government is to require specific disclosures, it must carefully consider modern marketing knowledge about how messages can most effectively be communicated.¹⁰⁷

3. *Consumer Education.* Consumer education is often overlooked as a means of dealing with incomplete information. However, omitted information often creates a problem because consumers lack general knowledge or information. For example, consumers may be misled by advertising which stresses that a brand is high in polyunsaturated fat because they may mistakenly believe that the consumption of polyunsaturated fat is positively beneficial in lowering the risk of heart disease. Indeed, this view was once widespread in the medical community, although it is no longer. Injury may thus result if consumers do not know that medical opinion has changed, so an efficient remedy must therefore seek to educate consumers to the new information. In this type of case, consumer education is likely to be an effective remedy.

One other advantage of consumer education over a disclosure approach is that an education campaign can be targeted more precisely to those who need the information. This may make it possible to convey the essential information more effectively. Because the advertising messages can be changed more frequently, the problem of wear-out can be minimized. Because the campaign can be centrally coordinated, the inefficiency which is likely to result from multiple exposures in different product advertisements can be avoided. Most important, when the information needed is general to a product class rather than brand-specific, it may be impossible to design a disclosure which individual firms have an incentive to publicize and promote. In these cases, a consumer education campaign—rather than a mandatory disclosure which advertisers will attempt to minimize—may well be the only method of effectively communicating the information to consumers.

IV. POLICY IMPLICATIONS

The analysis offered here is not intended to suggest strict legal standards for governing the communication of information to consumers. As noted earlier, the law in the area has usually relied on extremely general standards (such as “reasonable,” “deceptive,” or “unfair”), and

¹⁰⁷ Some of these issues are discussed in more detail in H. Beales, M. Mazis, R. Staelin, & S. Salop, *Consumer Search and Public Policy*, 8 J. Consumer Research 11(1981).

this generality may be entirely appropriate. One important implication of the analysis presented here is that it is extremely difficult to develop many hard-and-fast rules and that the proper policy to be followed will depend heavily on the facts of each case.

However, this does not mean that no content can be supplied to these broad legal standards. What follows is a set of principles which should be considered in evaluating consumer information remedies under such broad and general standards. These principles might be used by a legislature or an administrative agency (or even a common-law court) in assigning liability or designing information remedies; they might also be used by an appellate court evaluating such a decision against a statutory or First Amendment challenge. Because they apply in such a variety of legal contexts, no effort has been made to state them as formal standards of review, to specify the level of discretion left to the decision maker, or to assign burdens of proof or burdens of going forward on an issue. Instead, these principles are more in the nature of rules of thumb or guides to decision making since they identify issues that will usually be material to any consumer information decision.

1. *Literally False Claims Can Be Banned.* Because literally false statements offer no benefits to consumers, there is no reason to allow them.¹⁰⁸ As a matter of enforcement policy, the claims which pose the most serious concerns are those which consumers cannot easily verify for themselves (through direct observation, experience, or information provided by competing sellers or third parties). Also, claims which misstate a highly valued product attribute or an attribute with serious health or safety consequences are obviously more serious than those which misstate some less important matter. In principle, though, any outright false statement can justifiably be banned.

The problem arises with claims which may lead some buyers to draw a false inference but other consumers interpret accurately. A claim that a product "kills bacteria which cause baldness" may mislead most bald men into thinking that the product will help them, but it may also be extremely useful information to those men whose baldness does have a bacterial cause. In some cases, the number who interpret the claim correctly (or the value of the information to those who do) may be so small

¹⁰⁸ Even this principle is subject to the qualification that the costs of enforcement may make a ban inefficient for unimportant or immaterial claims. By the time a case comes before a reviewing court, though, those enforcement costs have usually already been incurred, and this objection has less force. Other reasons for not banning a false statement—for example, the possibility that a consumer will be deceived into buying a product which he then discovers he actually likes, or that false advertising will goad competitors into an increase in (honest) competition—are too speculative to justify a change in the rule of law.

that consumers as a whole still would be better off if the claim were banned.¹⁰⁹ Obviously, this cannot be determined without some idea of the number of consumers who interpret the claim accurately (as compared with the number who are misled) and the value of the information to them. However, even if a net injury is found, a better remedy may be some form of disclosure in the advertisement which preserves the value of the information for those who can use it while eliminating the deception of those who cannot.¹¹⁰

A similar analysis applies to claims which have only one possible interpretation but which have not been "adequately" substantiated, so that it is uncertain whether the claim is accurate or not. In this case, rather than the claim's misleading some consumers and informing others, there is some probability that the claim is accurate and an inverse probability that it will turn out to be false.¹¹¹ But we cannot simply say that the claim ought therefore to be banned without taking into account the possible harm done and benefit conferred under each possible outcome and the cost of further substantiating the claim. And even if analysis shows that the net effect of the unsubstantiated claim is undesirable, it is again possible that (in some cases) a preferred remedy might be to disclose the uncertainty to consumers in order to preserve whatever information even an uncertain claim might convey.

2. *In All Other Cases, the Costs and Benefits of the Remedy Are Crucial.* The implication of this is that, except where literally false claims are being banned, the merits of any action depend crucially on the balance of costs and benefits of the remedy being considered. This is true whether information is being disclosed (or claims are being banned) in order to correct false consumer perceptions or simply in order to make the market work better. As noted earlier, there is really no discernible line between the two.¹¹² In each case, the only principle for determining which information ought to be disclosed (or which claims ought to be banned) is to balance the benefits and costs of each action.¹¹³

¹⁰⁹ The converse, of course, may be true. Compare California Milk Producers Advisory Board, 94 F.T.C. 429, 547 (1979) (claim that "everybody needs milk" ruled not to be deceptive even though a small percentage of the population is lactose-intolerant and develops allergic reactions to milk).

¹¹⁰ This was the remedy actually chosen in *Ward Labs., Inc., v. FTC*, 276 F.2d 952 (2d Cir.), cert. denied, 364 U.S. 827 (1960) (claims that a product "kills bacteria which cause baldness"), as well as in a number of other cases.

¹¹¹ Indeed, the case of a claim with two possible interpretations can also be viewed as a matter of probabilities, since it will never be known with exact certainty how many consumers will draw a false inference and how many will make a correct interpretation.

¹¹² See Section I *supra*.

¹¹³ Again, this is not meant to imply that the law ought to require a full-scale cost-benefit

Of course, balancing the costs and benefits of even a relatively simple remedy can be a difficult task. An information disclosure, for example, can produce benefits not only by improving consumer choices from among existing products but also by stimulating sellers to compete to improve the mix of products that they offer. Similarly, the costs of the disclosure do not merely include the costs of collecting and communicating the information; they also include the possibility that some consumers will inaccurately interpret the disclosure¹¹⁴ or that the information disclosed will act as a signal which channels competition away from some other, more important, product attribute. Rigorous formal measurements of these benefits and costs may often be out of the question, and even an impressionistic sort of balancing may still be difficult. Consequently, additional principles are needed to help refine this analysis.

3. *Disclosures Are Usually More Efficient Remedies than Absolute Bans.* The disclosure of additional information should usually be preferred to a statute or rule which flatly prohibits certain claims.¹¹⁵ This will not always be the case, for in some instances the truthful information conveyed by a claim (for example, that "no product is more effective in curing baldness") may be of so little value that there is no reason to preserve it by permitting the claim. In other cases, it may be that a claim which was followed by a disclaimer retracting 99 per cent of it would simply confuse consumers or would leave many consumers' false expectations uncorrected. Still, these cases will probably be the exception rather than the rule, so a claim normally should not be banned unless there is good reason to conclude that a disclosure remedy would not be as effective.

It is interesting to note that the courts have adopted a similar principle (under the FTC Act), but only with respect to trademarks and trade names in which the advertiser holds a property interest. Deceptive trade names can still be banned (thus destroying the property)—but only if a disclosure

analysis before a regulatory body or a state legislature is allowed to act, or that a court ought to engage in full *de novo* review of such an analysis if one is undertaken. Judgments such as this would require an analysis of institutional competencies and review mechanisms that is beyond the scope of this paper. The point here is a weaker one: Whatever the legal burden of proof, the costs and benefits of the proposed remedy are what the decision maker ought to be considering.

¹¹⁴ When the Dutch government required advertisers of highly sugared foods to disclose that fact by displaying a toothbrush symbol in all advertising, it was found that many consumers interpreted it as a symbol of governmental approval. *Advertising Age*, Sept. 3, 1979, at 28.

¹¹⁵ It should be noted that the line between prohibiting a claim and requiring the claim to be accompanied by a disclosure is not always clear-cut. In some cases, a triggered disclosure which is long or burdensome or otherwise contrary to the advertiser's interest may so discourage the triggering claim as to effectively prohibit it.

remedy would not correct the deception.¹¹⁶ The Supreme Court showed some signs of extending this principle to all restrictions on commercial speech, declaring that “the preferred remedy is more disclosure rather than less.”¹¹⁷ However, it later explicitly disavowed this suggestion, stating that there was no rule “requiring a State to allow deceptive or misleading commercial speech whenever the publication of additional information can clarify or correct the effects of the spurious communication.”¹¹⁸

4. *Disclosure Requirements Are Usually Most Efficient when They Make the Greatest Use of the Advertiser's Special Skills.* Disclosure remedies should also be examined to determine whether they can be modified to give the advertiser more incentives to make them. It is not always necessary, for example, for the government to specify the exact wording of the disclosure, the size and color of the typeface to be used, the place in the advertisement where the disclosure is to appear, and the number of advertisements in which it will run. Indeed, such over-specification will often be counterproductive. Government policymakers are rarely skilled in writing effective advertising copy, and the resulting disclosure thus may not be the most efficient method of communicating with consumers.

One response to this problem is for the government to hire more skillful copywriters. However, an alternative which will often be more efficient is to give the advertiser more freedom in designing the disclosure—subject to the constraint that it effectively convey the intended message. For example, the government might specify one version of the disclosure but give the firm the option of using any other version which it could show (through copy testing or any other appropriate measure) conveyed the same message at least as effectively. This allows the advertiser to design a method of communicating the required information which minimizes any interference with the advertisement's legitimate (that is, nondeceptive) messages.¹¹⁹ The government might even limit its order to specifying the result to be obtained (either in terms of copy-testing results or in terms of actual consumer surveys), thus giving the advertiser complete freedom to choose the combination of disclosures, corrective advertisements, and

¹¹⁶ *Jacob Siegel Co. v. FTC*, 327 U.S. 608 (1946); *FTC v. Royal Milling Co.*, 288 U.S. 212 (1933). See also *Beneficial Corp. v. FTC*, 542 F.2d 611, 619–20 (3d Cir. 1976).

¹¹⁷ *Bates v. State Bar*, 433 U.S. 350, 375 (1977).

¹¹⁸ *Friedman v. Rogers*, 440 U.S. 1, 12 n.11 (1979). More recently, though, the Court apparently reintroduced a “least restrictive means” requirement for advertising restrictions intended to serve some purpose other than preventing deception. See *Central Hudson Gas & Elec. Corp. v. Public Service Comm'n*, 100 S. Ct. 2343, 2350–51 (1980).

¹¹⁹ Compare *Russo et al.*, note 30 *supra*.

other methods of consumer education that would most efficiently produce the desired result. This technique—the use of performance standards rather than design standards—will not always be feasible, but when it can be used, the results will probably be much more efficient.

5. *Brand-specific Disclosures Are Usually More Efficient than Those Which Require All Firms to Make Identical Disclosures.* Brand-specific disclosures involve the disclosure of information which distinguishes between competing products. The most common examples involve numerical scores such as miles per gallon or tar and nicotine ratings, but this would also include any disclosure which did not have to be made by every firm (for example, a safety warning applied to only the most dangerous brands in a market). As discussed earlier, such disclosures can produce two desirable effects not available with across-the-board remedies. First, the disclosure will be given extra publicity by those firms that score well on it (or do not have to supply a warning) and thus have an incentive to communicate it to consumers as effectively as possible. Second, the possibility of improving their scores on the rating (or eliminating the warning labels) will give firms an added spur to improve their products which would be lacking if the disclosures of all the firms were identical.

For the same reasons, continuous scoring should usually be preferred to grading systems with only a few grades. These discrete classifications not only provide consumers with less information but also reduce incentives to firms to improve their products, except at the margins where an additional improvement would move the brand into the next-higher class. It will not always be possible to develop continuous grading systems, of course, and in some cases discrete grades may be much easier for consumers to comprehend. In addition, problems may arise if information costs are reduced so as to give manufacturers strong incentives to compete along one dimension while other attributes are ignored. In general, though, decision makers should attempt to design disclosure remedies which vary with the characteristics of the product to as great an extent as possible. Uniform disclosures should not be ordered unless it is concluded that brand-specific disclosures would not be as effective.¹²⁰

6. *Public Testing or Specification of Testing Procedures Will Often Be More Efficient than Mandatory Disclosures.* Where graded information about competing products can be developed, it may not be necessary to

¹²⁰ These considerations change slightly if the disclosure is useful only in correcting a false impression conveyed by a particular claim. This is still a "brand-specific disclosure"—that is, only those firms making the questionable claim will have to make the disclosure—but the only way firms can escape the requirement is not by improving their product but by eliminating the doubtful claim. Unless the claim is one which is more likely to mislead consumers than to help them, this effect on incentives to firms is more a cost than a benefit.

require that the information be disclosed at all. It may be sufficient for the government simply to publish the information and to let the advertisers give it whatever publicity they see fit—or even just to establish measurement and scoring procedures and then police advertisers' claims to prevent their falsification of the measurements. Or, even if advertisers do not publish the information, it may be enough to make the information available to third parties such as consumer magazines or buyers' intermediaries. If the information has been designed in a way that makes it attractive enough that at least one party will want to publicize it, such an approach may yield most or all of the benefits of a mandatory disclosure with few of the legal costs and little of the risk of compelling disclosure of information which turns out to be worthless.

Again, this does not mean that voluntary disclosures are always to be preferred. Since such information will usually be disclosed only by sellers of whom it speaks well, it may be necessary (at least for some initial learning period) to require disclosure by all sellers so that consumers get an idea of the relevant range. Mandatory disclosures may also be needed to inform consumers about the significance of the information (if no single seller would have an incentive to do so)—or, of course, if the information to be disclosed is unfavorable for an entire industry. The point is simply that decision makers—whether courts, public agencies, or legislatures—ought not to order mandatory disclosures until they have ruled out the possibility that the information would be disseminated voluntarily.

7. *In General, Remedies Which Directly Address the Market Failure Will Usually Be More Efficient than Those Which Do Not.* The common or underlying principle here is that the most efficient remedies will usually be those which do no more than is necessary to correct the market failure directly.¹²¹ If the problem is that sellers have no incentive to agree on standardized measurements (to facilitate consumer comparisons) or have no effective way of guaranteeing to consumers that statements about credence qualities are accurate, it may be sufficient for the government to specify a standard method of measurement and to police to prevent falsified measurements. The advantage of such remedies is that they tend to make the greatest use of private market incentives, thus enhancing the benefits of the remedy, while minimizing the risk of unintentionally forcing inefficient behavior on the market, thus reducing the potential costs of a remedy.

¹²¹ This is a possible interpretation—though by no means the only one—of the recent requirement of the Supreme Court that restrictions on commercial speech (for purposes other than preventing deception) “directly” advance whatever governmental interest is at stake. *Central Hudson Gas & Elec. Corp. v. Public Service Comm’n*, 100 S. Ct. 2343, 2350–51 (1980).

A strong implication of this recommendation is that the decision-making body ought to analyze the cause of the market failure or the reason why the information has not been voluntarily disclosed in the course of selecting an information remedy.¹²² Such consideration is also useful in deciding whether to intervene at all, of course. Merely finding that consumers lack certain information does not imply that that information ought to be disclosed in some way, for it could be that the information has not been disclosed because it is expensive to produce and of little value to consumers. But once the decision to intervene has been made, an understanding of the reasons behind the past operation of the market is also essential to select the best method for improving that operation in the future.

For example, it may be that the market did not generate adequate information about the health hazards of cigarettes because such information would reflect unfavorably on all cigarette companies, and no other product is a sufficiently close substitute to gain from the disclosure. Therefore, one response—a measure which the government took—was to require cigarette companies to disclose the health hazards of smoking in their advertisements and labels. However, another response which addressed the market failure more directly was to develop measurements of the tar and nicotine content of various brands, thus generating information about health hazards which it was in the interests of some firms to communicate. At this point, it was probably unnecessary to require that these measurements be disclosed by all brands, beyond a possible initial period which would give consumers some idea of the relevant range. The prominence given to such measurements in the advertisements of sellers who scored well resulted in a disclosure that was communicated far more effectively than the mandatory health warning which no seller had any incentive to promote. The tar and nicotine levels addressed the market failure directly by supplying individual firms with an incentive to communicate; the mandatory health warning did not.

Again, this does not mean that a remedy which directly addresses the cause of the market failure will *always* be the most effective remedy. Indeed, the distinction between addressing a market failure “directly” and some other indirect remedy which attempts to correct for the failure by moving the market to where it would otherwise have gone is probably a heuristic distinction rather than an analytic one. The major import of this

¹²² Though such consideration is not legally required, the FTC has begun this in its information disclosure rules. See Statement of Basis and Purpose, Advertising and Labeling of Home Insulation, 44 Fed. Reg. 50218, 50222 (1979).

recommendation is simply that the decision maker ought to consider ways that the market failure might be corrected more or less directly and move on to more indirect remedies only after these have been rejected. The less government is required to specify, and the more it can leave to the play of private marketplace incentives, the more effective the remedy is likely to be.