

WORKING PAPERS



A FRAMEWORK FOR EVALUATING CONSUMER INFORMATION REGULATION

Michael B. Mazis, Richard Staelin, Howard Beales
Steven Salop and Dee Pridgen

WORKING PAPER NO. 24

June 1980

FTC Bureau of Economics working papers are preliminary materials circulated to stimulate discussion and critical comment. All data contained in them are in the public domain. This includes information obtained by the Commission which has become part of public record. The analyses and conclusions set forth are those of the authors and do not necessarily reflect the views of other members of the Bureau of Economics, other Commission staff, or the Commission itself. Upon request, single copies of the paper will be provided. References in publications to FTC Bureau of Economics working papers by FTC economists (other than acknowledgement by a writer that he has access to such unpublished materials) should be cleared with the author to protect the tentative character of these papers.

BUREAU OF ECONOMICS
FEDERAL TRADE COMMISSION
WASHINGTON, DC 20580

A Framework for Evaluating Consumer Information Regulation

With the emerging interest in consumer protection, government agencies have enacted a variety of regulations affecting marketplace information. For example, the Treasury Department until very recently restricted comparative alcoholic beverage advertising (BATF 1976), the Food and Drug Administration (FDA) now requires manufacturers to disclose nutrition information on food packages (FDA 1973) and the Federal Trade Commission (FTC) has attempted to eliminate restrictions on eyeglasses' advertising (FTC 1979). Given the variety of approaches used, a coherent structure is needed to evaluate any regulation which directly affects the amount and scope of the marketplace information (i.e., a "consumer information remedy"). This article provides such a framework for assessing alternative regulatory approaches.

The approach taken is to integrate the theories of three diverse disciplines; economics, consumer behavior and law. Although each area has much to say about specific aspects of consumer protection regulation, a wider perspective is needed to develop a comprehensive framework. Economic theory normally addresses the reactions of sellers to changes in the marketplace while consumer behavior theories are most concerned with consumers' reactions to market changes. Both reactions must be forecasted if the benefits and costs of any regulatory action are to be predicted. Finally, it is important to understand the views of the judiciary, since legal thought has a great influence on the interpretation of and/or restrictions placed on any rule or regulation.

The overarching principle of this article is the assessment and comparison of costs and benefits. As a result, it discusses first, the question--when is government intervention appropriate?--by using findings from both economics and consumer behavior to classify relevant costs and benefits.

Next, generic categories of cost and benefits are presented and specific examples of each are provided. Based on these categories, three standards for evaluating any information remedies are developed: incentive compatibility, communication effectiveness and First Amendment protection, incorporating the views of economists, consumer researchers and lawyers respectively.

These three propositions then are considered jointly to suggest an analytic framework for classifying information remedies along a "Remedies Continuum," from the least to the most restrictive of market forces. At one end of the Continuum are those remedies which remove barriers and permit the free flow of information. In the mid-range are remedies which involve more active government intervention aimed at enhancing information flow; remedies such as requiring a specified time period after "purchase" to enable the consumer to search for additional information ("cooling off" laws) and requiring manufacturers to disclose specific information. Finally, at the other end of the Continuum are those remedies which limit or prohibit dissemination of marketplace information, such as banning cigarette broadcast advertising. This paper takes the position that government should turn first to less restrictive remedies since they are likely to be least disruptive and impose fewer costs than more restrictive approaches.

By drawing on varied disciplines, this paper a) provides a comprehensive view of consumer protection regulation and b) develops a framework for evaluating consumer information regulation which can serve as a useful management tool. Persons currently involved in one aspect of the problem (e.g., consumer researchers working in the public policy area or managers affected by consumer protection regulation) should find the discussion of interest since it provides a) broad exposure to questions that must be

answered before a particular remedy can be adequately evaluated and b) the conceptual framework necessary for conducting such an analysis.

Since the focus of the article is to develop principles which can be applied to the total range of consumer protection information regulation, the arguments put forth are by necessity general in nature. Thus, there are few pragmatic prescriptions applicable to specific marketing applications. Also, since this article centers on information remedies which directly affect the quantity and variety of marketplace information, the analysis excludes government efforts which affect information indirectly, such as anti-trust enforcement, or remedies which address substantive or procedural rights for consumers, such as refund provision. Also excluded are consumer education efforts, and voluntary information and standard-setting procedures. Although these approaches are useful substitutes for information remedies, they are beyond the scope of this article. (See Breyer 1979; for a broad overview of regulatory alternatives.) For an extended discussion of the concepts discussed in this article, see "Consumer Information Remedies," (FTC 1979).

When is Government Intervention Appropriate?

Traditional micro-economic theory posits that both buyers and sellers are endowed with perfect information; the buyer to discriminate perfectly between all offerings and the seller to judge perfectly the consumers' needs. Based on this information flow, it follows that consumer sovereignty

will efficiently govern the allocation of resources in the economy through marketplace transactions. That is, consumers' informed marketplace choices transmit signals to sellers regarding the valuation of products, and sellers respond by varying production based on the relative value consumers place on competing alternatives. This situation where buyer and seller are not restricted in their actions is often referred to as the free market solution. Assuming perfect information, these conditions lead to the optimal allocation of scarce resources.

Since this marketplace economy is based on the accurate transmission of signals between buyers and sellers, some government intervention may be appropriate when there exists any informational market failure, i.e., when consumer decisions (signals) are based on false or limited information. This intervention can involve any one of a series of remedies aimed at curing the market failure. The major criteria for selecting among remedies is the relevant benefits and costs associated with each solution. In this section, the major benefits of "curing" a market failure are discussed. Later, cost issues are explored.

In order to determine the benefits of any remedy designed to increase consumer welfare associated with curing an information market failure, three broad benefit categories should be considered: a) enhancing information so that consumers can improve their choice among available offerings; b) improving the quality of the available offerings; and c) lowering the general price levels of these offerings.

The first benefit--better consumer choice--at one level of analysis is almost self-evident since consumers armed with more complete information should be able to make better decisions than when choice is based on

limited knowledge about product attributes. The determination of the value of more complete information, however, is a controversial issue. Bettman (1975), for one, raises the question of whether information has value by itself or whether it needs to change behavior to have any value. In a way, both views are correct. Using a decision theoretic approach it is possible to show that information has some value if a) it has the potential of modifying consumer actions and b) the resulting actions lead to a better outcome. The latter aspect has been questioned by Jacoby et al. (1974) who showed instances where too much information led to a poorer decision.^{1/} The first condition implies information need not change everyone's behavior, only have a probability of modifying behavior. In this way, information can be said to have value by itself. However, for information to have any substantial benefit to society, it either has to result in a significant saving to a set of consumers or have a significant probability of modifying behavior. Consequently, in an aggregate sense, information must result in some behavior change for it to have any value.

The second benefit--improved product quality--occurs whenever new information allows some consumers to alter their choice, thus providing a signal to the sellers to change their product. For example, when the FTC required cigarette manufacturers to provide the level of tar and nicotine in cigarettes, some consumers who sought "safer" cigarettes switched their consumption to lower tar and nicotine products. Consequently, sellers now provide a much wider range of cigarette products. This increased selection benefits all consumers, even those who didn't use the original information.

^{1/}Their analyses of these data has been questioned by a number of other researchers (Russo 1974; Staelin and Payne 1976; Summers 1975; Wilkie 1974).

The third benefit--reduced prices--occurs whenever the new information reduces the seller's "informational market power." It is often assumed that the presence of a large number of sellers will cause the price level to fall to the perfectly competitive price. However, this is not necessarily the case. For example, assume that a consumer is searching for the lowest price for a particular brand of toaster. The consumer visits one store and finds that the price for that brand of toaster is a bit higher than he or she suspected. However, the only way that the consumer can determine the lowest price is to visit or to phone other stores. If the price premium is perceived to be reasonable, a consumer may be willing to pay a little extra rather than incur the extra search costs. Thus, the first store is able to extract a small premium--i.e., it has a small degree of market power.

More generally, if consumers are imperfectly informed, even small sellers may achieve information market power. Thus, the FTC (1975a) claimed that although there are over 20,000 funeral sellers, each small funeral home may be in a position to achieve a degree of informational market power over its customers. This is because consumers do not typically comparison shop for funeral services or purchase these services frequently. As a result, there is excess capacity at many funeral homes and the FTC believes industry prices are above the perfectly competitive price.

Conditions Associated with Significant Consumer Benefits

In addition to identifying potential consumer benefits, it is important to recognize the three market conditions under which these benefits are likely to materialize. First, there are situations where consumers misestimate product performance along highly valued attributes. For example, consumers may misjudge the energy efficiency of an appliance or the durability of a car. Where experience with the product can reveal the value of the attribute, the marketplace can normally overcome this deficiency since consumers will subsequently avoid less desirable products causing sellers to lose business. This market correcting mechanism may not be the appropriate solution, however, for product classes where sellers do not rely on repeat purchases. Also, for certain relatively expensive, hazardous or infrequently purchased items, the net loss to consumers relying on less than perfect information may be so great that government intervention is justified. Examples of such situations include recent government effort to increase the flow of correct information in the sale of encyclopedias, land and housing.

Another condition associated with the need for an information remedy is the lack of incentive for any seller to provide relevant information. This occurs whenever a) consumers cannot determine the presence of the desired attribute even after product use or b) the information would act as a deterrent to product class sales. Thus, cigarette manufacturers had no incentive to post health warnings on their products, nor do food manufacturers find it in their interest to list the level of "natural" contamination (e.g., insect parts and rodent hairs) found in most foods even though consumers indicate that they want such information.

A third situation for which there may be significant benefits associated with government intervention is the existence of substantial "external" benefits of information availability which are not fully accounted for in individual decisions. In this sense, information is similar to traditional "public goods", such as national defense or lighthouses, where the private demand for such facilities is normally insufficient, since the benefits of such facilities accrue to everyone. Similarly, although information may provide some benefit to the consumer who gathers it, the positive effects of increased information on the competitive process may also have substantial benefits to consumers who do not seek or use the information (Salop 1978). In other words, from a societal point of view, the private search decisions of individuals may lead to an underprovision of marketplace information. In this respect the free market solution would not be optimal.

It should be noted that only a significant minority of consumers need to gather and use information in their purchase decisions to cause the desired response from sellers.^{2/} For example, label reading for food ingredients and nutrition by a minority of consumers has led to significant product modification in the case of baby foods (removing salt and artificial ingredients) and of ready-to-eat breakfast cereals (vitamin fortification). Thus, government information disclosures designed to improve the efficiency of a subset of individual purchase decisions may benefit all consumers because of the resulting stimulus to competition.

Costs of Information Remedies

The above discussion has been concerned with the possible benefits of

^{2/} Another way of saying this is that not all consumers have to use information for it to accrue value to all consumers, i.e., information can have value other than helping the consumer make a better choice.

governmental intervention and establishing circumstances when these benefits tend to be greatest. In this section, the generic costs of information remedies are briefly described. Later in the article, the benefit-cost paradigm is applied to a variety of regulatory alternatives.

There are three major categories of costs which should be assessed when evaluating information remedies:

- (1) the affected firms' costs of complying with the remedy;
- (2) the government's costs of enforcing the remedy; and
- (3) the costs to buyers and sellers of any unintended side effects.

The compliance and enforcement costs, although often significant, are usually easier to identify than those which fall under unintended side effects. The compliance costs for a remedy using labeling disclosures include not only the printing costs but also the possible loss of flexibility of being unable to make minor product modifications without discarding the labels. For instance, food manufacturers may find it difficult to substitute similar ingredients or to slightly modify a recipe since current food regulations require the listing of all ingredients in the order of predominance. Another example is the record keeping and testing costs associated with substantiating advertising claims.

Enforcement costs must also be considered in remedy evaluation. For instance, although government monitoring of salespersons could greatly reduce the amount of marketplace deception, exorbitant enforcement costs make the remedy impractical. In another example, the U.S. Department of Agriculture (USDA) uses the costly method of requiring prior approval of each label change for products under their jurisdiction, while the FDA chooses a more selective approach, thereby reducing its enforcement burdens.

The last category of costs, unintended side effects, is normally the most difficult to quantify prior to enacting a regulation. However, careful analysis of buyer and seller reactions to the information remedy will often permit accurate prediction of these costs. For instance, if the costs associated with message development are increased by regulation, a seller will tend to avoid dissemination of this type of message. Thus, if comparison advertisements are required to disclose more detailed information than single product ads (e.g., requiring information for both advertised and compared brands (FTC 1974)), it is probable that the number of comparative advertisements will be reduced since they are more heavily burdened. Since many consumer advocates view comparative ads as providing better information, the disclosure requirements in this example could be viewed as having deleterious side effects.

The "cooling off" laws provide another example of possible unintended side effects. These rules require the seller to wait a period of time before consummating the sale, thereby allowing the buyer to seek more information and/or to re-evaluate his or her decision after the pressures of the salesperson are removed. However, some sales-oriented firms have begun to use the rule as a sales "gimmick" claiming that the consumer should sign up for the service or product now since they can cancel the sale at a later date. The firm assumes that most consumers will not follow through with the cancellation. Consequently, the "cooling off" laws may actually "hook" a segment of the public onto the product or service that they would have normally resisted purchasing prior to the regulation. Although this effect may not be injurious to consumers, it was not the purpose of the law.

Three General Principles for Designing Information Remedies

Although it is useful to exhort government agencies to more carefully evaluate proposed regulations, a set of general principles is needed to guide development of information remedies which maximize the benefit-cost ratio. In the next section, three such principles are presented: (1) incentive compatibility, (2) communication effectiveness, and (3) First Amendment protections, these principles derived from economic, consumer behavior, and legal theory, respectively.

Incentive Compatibility

An "incentive compatible" remedy is one which is compatible with sellers' incentives and consequently produces the desired results with minimal compliance and enforcement costs. In a sense, all government regulations ultimately rely on market incentives, such as the desire to avoid costly litigation and fines. The concept of incentive compatible remedies goes beyond the typical "command-and-control" approach, however, by harnessing positive marketplace forces rather than using negative incentives that require costly enforcement efforts and impose heavy compliance burdens to achieve the desired effect.^{3/}

One example of an incentive compatible approach is the effort by the Justice Department and FTC to eliminate various professional advertising restrictions, such as for attorneys, veterinarians, dentists, physicians and accountants. These actions do not require professionals to advertise. Instead, the benefits to sellers from such advertising is expected to induce a greater flow of useful market information, which in turn, allows consumers to make better decisions, spurring competition among sellers.

^{3/} Incentive compatible remedies are somewhat analogous to reward authority in the channel management literature (Stern 1969). Thus, the regulatory agency can modify the seller's behavior (i.e., use its authority) without markedly increasing the conflict between itself and the seller.

These actions have led to the establishment of "department store" dentistry which relies on advertising to attract customers. Often these consumers are new in that they do not have a regular dentist. They are attracted to the service because they find it more convenient and lower priced than prior available dental services.

A second example of an incentive compatible remedy is the establishment of a standard, such as miles-per-gallon ratings for automobiles and tar and nicotine measures for cigarettes. These measures have been used by firms in promoting particular brands, thereby furthering competition along critical product dimensions.^{4/}

There is good reason for designing incentive compatible remedies, since they do not require government agencies to ascertain consumer information needs nor do they require monitoring of the exact consumer response to information or charting consumer information needs over time. Instead, these tasks are left to the sellers who are better equipped to interpret consumer needs. Moreover, they have an economic incentive to accomplish these tasks efficiently.

The above logic also implies that approaches which permit market forces to determine the exact form of information provision are likely to be more "incentive compatible" than alternative remedies which restrict marketplace practices or offerings. Consequently, as a first approach to an information problem, regulators should consider regulations which rely on consumer sovereignty and seller incentives to achieve their goals rather than trying to specify with precision how the marketplace should operate.

^{4/} It should be noted that the FTC banned cigarette manufacturers from using claims of tar and nicotine content from 1957 to 1966. By finally establishing one particular measure for these attributes, the FTC provided an "incentive" for sellers to increase the quality of their products along these dimensions since they are now allowed to advertise their brand on these attributes.

Communication Effectiveness

Communication effectiveness is a second important principle for designing information remedies. Simply stated, wherever the government establishes information standards or requires the disclosure of information to consumers, it must insure that the information is effectively communicated, i.e., the information is noticed, comprehended and used by consumers. Thus, this principle concentrates on increasing information benefits by requiring disclosures be compatible with consumer needs taking into account the simplifying rules used in making purchase decisions.

This principle is extremely useful in determining the impact of the information remedy on the buyer. Numerous studies have indicated that the form, availability and context of the information can substantially alter its use and consequently the ultimate consumer decision.

There are two important implications which flow from the need to effectively communicate information to consumers. First, government agencies must approach the problem in much the same way as sellers designing a marketing campaign (Enis, Kangun and Mokwa 1978). This entails considering the entire information environment as opposed to focusing on one element, such as product labels or advertising. This would imply that agencies consider designing complementary policies; for example, using advertising to motivate search and then organizing labels and point-of-sale material to facilitate consumer use of this information in decision making.

A second implication flows from the dual principles of communication effectiveness and incentive compatibility. More specifically, whenever a disclosure is required, particularly as a remedy for deceptive advertising, government agencies should consider allowing sellers to design the exact

format instead of specifying particular words or sentences. In order to monitor the firm's actions, performance standards could be set requiring the advertiser to show a certain level of brand beliefs or consumer comprehension of the required message instead of mandating the exact wording of the corrective ad (Wilkie and Gardner 1974). In this way, the responsibility for designing disclosures is placed on the advertiser. Since this disclosure would be required to be continued until the performance standard is met, the advertiser would have an incentive to maximize, rather than minimize communication effectiveness.

First Amendment Protection

The third general principle is to favor information remedies that adopt the First Amendment's bias toward the unimpeded flow of nondeceptive commercial speech. The First Amendment can be seen as promoting information dissemination, thereby complementing the principles of incentive compatibility and communication effectiveness by favoring approaches which allow the marketplace maximum flexibility in the use of nondeceptive claims. This would imply that remedies aimed at curbing deception should be carefully designed to avoid unduly stifling truthful information.

Although government agencies do possess considerable autonomy in regulating deceptive information and requiring information disclosures, the courts have begun to carefully scrutinize actions based on First Amendment concerns. For example, a Court of Appeals declared that an FTC order banning Beneficial Finance Corporation's use of the term "instant tax refund" was improper and that the agency should "go no further....than was reasonably necessary to accomplish the remedial objective." The "confessional preamble," "contrary to prior advertising," ordered by FTC for Listerine was struck as being unnecessary to accomplish the objective of correcting false beliefs.

Other orders have been modified as being overly broad (Cohen 1978).

It is currently unclear if the courts require the least restrictive remedy to be implemented in all situations. Recent cases have permitted extensive state restrictions of in-person solicitation by lawyers (Ohlralik 1978) and of opticians' trade names (Friedman 1979). However, the spirit of First Amendment commercial advertising cases is to use bans as a last resort and to seek remedies which maximize the flow of ideas in the marketplace.

Information Remedies Continuum

Thus far general classes of costs and benefits for any information remedy have been delineated. In this section a framework is presented for categorizing any information remedy which directly impinges on or shapes the content of the commercial information received by consumers. Underlying this framework is the assumption that there exists a continuum of approaches and that less restrictive remedies should be considered before turning to more restrictive ones.

Both legal and economic theory favors the least restrictive alternative necessary to achieve legitimate regulatory goals. First Amendment cases support the proposition that remedies should keep the flow of commercial information as "clean" as possible without unduly restricting total information flow. In addition, economic theory points out that competitive forces if allowed to operate unfettered will produce the optimal quantity and variety of goods at optimal prices. This implies that even in situations where government intervention is necessary, the market should be allowed to function as freely as possible, i.e., information remedies should go only far enough to restore competitive forces.

Since the restrictive nature of a remedy is such an important dimension, this factor has been used to organize the following discussion. In general, three major classifications for information remedies varying from least to most restrictive are envisioned:

- 1) removing restraints on information flow such as eliminating barriers against professional and comparative advertising,
- 2) enhancing information flow by permitting greater consumer search, developing information standards, and disclosing information, and
- 3) restricting information flow by banning product claims.

These three categories of remedies are discussed through a series of examples. For each example, the previously developed framework is used to set forth benefits and costs.

Removing Restraints on Information Flow

There are numerous situations where spontaneous flow of commercial information is being held back by public or private advertising constraints. In these cases, it is often possible to eliminate the restraints and let consumers benefit from the additional commercial data that results from natural market forces. For example, there has been a concerted effort to remove the barriers against the dissemination of advertising for professional services and products and for comparative advertising.

Benefits of Removing Restraints. The benefits of eliminating barriers against advertising include reducing search costs, lowering prices, encouraging new entrants and accommodating underserved groups. Reduced search costs were of major concern in the Supreme Court's Virginia Pharmacy decision (1976), which states "those whom the suppression of prescription

drug price information hits the hardest are the poor, the sick, and particularly the aged." These consumers may not be in a position physically to go from store to store to determine the best price for a specific drug. Increased advertising should help reduce search costs and also result in lower prices. This was found to be the case for eyeglass advertising where comparison studies showed prices were substantially higher (by 25% to 40%) in states which banned advertising than in jurisdictions which had no restrictions (Benham and Benham 1975).

Bans on advertising also tend to restrain competition by making it difficult for new entrants to break into the market. The Bates opinion observed that lawyer ad bans had "perpetuate[d] the market position of established attorneys" (Bates 1977). The problem of new health professionals seeking to build a clientele promises to become particularly acute, since the number of practitioners in this field is expected to increase 40% to 70% by 1990 (DHEW 1978). Without advertising, this potential source of competition could be stifled.

Advertising by new entrants not only enhances competition, it can also facilitate the expansion of services to previously underserved groups. Ghetto residents who have become accustomed to resorting to hospital emergency rooms for day-to-day medical problems, for instance, could benefit from learning through advertising about young doctors, who, because of the increased supply of physicians, may attempt to establish practices in urban areas. Likewise, new legal and dental services which rely on advertising to attract consumers who did not extensively use the existing (and normally higher priced) services have sprung up in recent years.

Drawbacks of Removing Restraints. While elimination of advertising restraints is an attractive remedy because it relies on market forces to increase the flow of information to consumers with a minimum of government interference, it could have a number of side effects. One of the arguments against professional advertising was that this practice would lead to a decline in the quality of services provided. In Virginia Pharmacy, for instance, the state argued that advertising would undermine the pharmacist-customer relationship (Virginia Pharmacy 1976). In Bates, the bar association feared that advertising would have an adverse effect on quality (Bates 1977). In both cases the Supreme Court rejected this notion, however, because state licensing boards could and should maintain professional standards without the need for keeping the public in ignorance. Thus, the Court opted for increased information flow over the possible extra costs of enforcing standards.

Even if advertisers cut back on services, this decrease may not represent a substantial cost to consumers if they are aware of the new level of service provided and its implications. In other words, the cutbacks might not be viewed as a lowering of quality, but rather the development of a new service designed to provide a streamlined form of service at more affordable prices.

There are other forms of professional advertising that do not rely on mass media. Some forms, such as in-person solicitation, may be so susceptible to abuse that they should remain restricted in some way. This was the logic of the Supreme Court in upholding a ban on in-person solicitation by lawyers:

The aim and effect of in-person solicitation may be to provide a one-sided presentation and to encourage speedy and perhaps uninformed decision-making (Ohralik 1978, p. 457)

Finally, it should be recognized that there may be instances in which the mere lifting of formal restrictions will not result in enhancing information flow. The official ban on advertising by funeral directors was removed in 1968, yet the FTC rulemaking record ten years later reported that there was very little price advertising being undertaken. Behavioral studies determined that personal influence within the community of service providers hindered the flow of information with those engaging in price advertising being subject to peer pressure and ostracism (FTC 1978c). An analogous situation may exist for discount real estate brokers. This sort of pressure is most likely to occur in industries where there is a need for cooperation (e.g., a multi list for real estate brokers), although it can also occur in industries where there exists a strong professional identity. It is not clear that a satisfactory barrier removing remedy can be devised to circumvent this occurrence.

Enhancing Information Flow

The next general category on the remedy continuum deals with rules aimed at directly enhancing information flow. Within this category are minimal intervention strategies such as permitting greater consumer search through "cooling off" provisions and "untying" two logically separable services (e.g., requiring eyeglass prescriptions to be given to consumers to facilitate purchase from alternative providers). Also included in this category are the strategies of establishing standard definitions before certain selling claims can be made (e.g., for a "natural" or "low calorie" food) and developing standards for measuring product quality (e.g., measurements of estimated automobile gasoline mileage). Such standards can be used voluntarily by a seller or disclosure may be required by a government agency. Required disclosures involve the greater degree of government involvement

and marketplace restrictions since dissemination is mandated regardless of competitive forces. Each of these remedies is discussed below.

Permitting Greater Consumer Search and Experience. One method of increasing information flow without "heavy handed" government intervention is enhancement of consumers' opportunity to engage in information gathering consistent with their needs. The government takes no direct role in determining the exact form of the information, but does guarantee that the consumer has time to conduct a search. In this way, consumers have considerable freedom to select information they perceive to have greater value than the associated search costs.

"Cooling off" laws are a good example of a search remedy, since a time period is set aside (typically three days) for consumers to consider information stored in memory or to consult friends or other unbiased sources. While "cooling off" periods are potentially quite useful, there are communication effectiveness questions which may affect the remedy's success in curing fundamental marketplace problems since consumers may not understand their right to cancel the sales agreement. Also, as mentioned earlier, consumers may be impeded from cancellation by psychological (e.g., cognitive dissonance) or social factors which could lead to unintended side effects.

When considerable product experience, rather than mere information gathering, is needed for consumers to gauge a product's utility, more restrictive remedies may be appropriate. For example, the usefulness of a hearing aid is frequently difficult to ascertain prior to receipt and trial. Under these circumstances the FTC has argued that direct observation of product performance and refund provision is necessary for consumers to make informed judgments about prices and quality (FTC 1975b).

Such "experience" remedies are more costly than "search" remedies because contract cancellations or returned products can result in significant losses to sellers. The FTC's proposed health spa rule (1975), which would allow consumers to cancel contracts after the facilities are built, could affect the ability of small firms to raise the necessary funds to build a facility since signed contracts are useful in securing financing. These costs must be balanced against the benefits of possible reductions in high pressure tactics by allegedly unscrupulous sellers.

Separating Diagnosis and Treatment. In cases where delivery of consumer services requires considerable expertise, diagnosis of the problem often precedes repair. In some situations these two aspects can be uncoupled. For example, a physician diagnoses a medical problem and recommends treatment in the form of a written prescription for a drug. The patient is then free to shop among competing pharmacists to have it filled. This should be contrasted to situations where the diagnostician recommends and then provides the treatment. In this latter case, the potentially neutral diagnostician has an economic incentive to recommend unnecessary or expensive treatment since he or she profits from this sale.

A viable remedy is to make it possible for consumers to obtain a diagnosis separate from treatment, when this can be done at little cost. Thus, the Eyeglass Rule (FTC 1978a) gives patients the right to have the diagnosis (prescription) written out, so that they can shop elsewhere for treatment (getting the glasses made and fitted). A similar approach may be possible for dentures. A recent Oregon statute limits the diagnosis of any gum disease to dentists but permits dentures to be fit by either dentists or denturists (Journal of American Dental Association 1978).

Similar remedies might involve giving consumers the right to auto repair work sheets, medical records, X-rays, and other documents which are normally prepared by the diagnostician anyway and thus can be given to the consumer at little cost. This remedy has the advantage that, if separating diagnosis from treatment is not efficient, few consumers will attempt to do so, so the remedy would not force the market into a less efficient alternative. There are, of course, communication issues involved since consumers must be apprised of their rights to obtain such information and must be able to interpret the documents provided.

Although the benefits of decoupling can be significant, there are often large costs associated with separating diagnosis from treatment. For one thing, it may be technically inefficient to have the treatment performed by anyone but the original diagnostician. Certain medical problems can only be diagnosed by actually cutting the patient open. Once this is done, it would surely be inefficient to require the doctor to stitch the patient back up so that the patient can shop elsewhere to have the needed corrections performed. The same is often true, in a less dramatic form, for auto repair. Even when there are no physical constraints to preclude separating diagnosis from treatment, the time and

effort required to use a second source for repair may discourage many consumers from using a separate diagnostician. Pilot automobile diagnostic centers appear to have this shortcoming.

A second problem is that, if diagnosis is sold separately, the consumer must have some way of evaluating the quality of the diagnostician's services for that market to work efficiently. If the consumer is unable to distinguish the skilled diagnosticians from the quacks, then he or she has no way of telling whether there is any advantage of patronizing any particular diagnostician.

Information Standard-Setting. Another way of enhancing information flow is for government agencies or private groups to develop information standards. These standards are frequently incentive compatible since they provide sellers a method of representing a product or characteristic, thereby facilitating comparison or easing the task of judging product performance.^{5/} Three types of information standards are used:

standardizing the definition of terms (e.g., "wool" means the "fiber from the fleece of a sheep or lamb")

establishing a metric for measuring a product attribute (e.g., U.S. Recommended Daily Allowance (RDA) as a method of measuring nutrient value)

establishing a grading system for categorizing scores on the metric (e.g., U.S. No. 1, No. 2 and No. 3 for lima beans).

While the remedies discussed in previous sections rely on voluntary actions by sellers (e.g., removing constraints) or by consumers (e.g., "cooling off" laws), information standard-setting requires government

^{5/}This section discusses "standard setting" solely with regard to information about marketplace commodities rather than minimum production requirements for products.

action to prohibit claims which do not meet the standard. However, it is a relatively non-restrictive remedy provided the standard is set properly.

Standardizing the definition of "natural," as proposed in the FTC's Food Advertising Rule (FTC 1974), would be less restrictive than requiring disclosure of the definition or a ban on "natural" claims.^{6/} Assuming that the definition is reasonable, those sellers whose food qualifies as "natural" (no artificial ingredients and minimal processing) will be able to make the claim without having to counter other "natural" claims which use a different standard. This approach can be contrasted with the remedy of requiring sellers to disclose additional information if they mentioned the standard (i.e., anyone could claim "natural" as long as they disclosed all types of artificial ingredients and amount of processing). This disclosure would place an extra burden on advertisers selling "non natural" products who wanted to use the term. A more restrictive approach would be to ban the word "natural." While this would eliminate deceptive and confusing usage of the term, it would be more restrictive of speech than simply standardizing the definition.

A second method of setting standards is to provide a single objective metric for a product attribute which all firms can use. This standard lowers the cost of communicating and often creates or improves the market for the attribute. For example, while it has always been easy to communicate the price of insulation, the quality for this product class is difficult for consumers to observe and for sellers to describe credibly without some standard. By developing the R-value metric, the FTC may have lowered the communication cost and facilitated the market for this attribute.

^{6/}The Food Advertising Rule (Phase I) actually proposes to require the disclosure of the definition of "natural" each time it is used. For the purpose of this example, however, it is assumed that the definition is simply standardized.

For standard-setting to offer any significant benefits, some consumers must value the characteristic which the standard measures. If consumers are uninterested in that attribute, do not understand the measure, or do not feel the attribute is worth the cost, then the marketplace will remain unchanged. There is no indication that after the FTC required light bulb packages to display brightness information in lumens that consumers altered their purchase habits (FTC 1970). Likewise, current sales figures for air conditioners indicate that EER information has not caused significant numbers of consumers to switch to the higher priced but more energy efficient air conditioning. Perhaps consumers should value this type of information, but they have not and therefore standards have not made the market more competitive (Katz and Rose 1976).^{7/}

It may be difficult to determine in advance whether there will be a demand for the information provided by a new standard. As marketers have found with the introduction of new products--even with the best possible market research, the chances of failure are high. Therefore, once a standard has been given a full and fair trial, and it produces only minimal market response because there is little market demand for either the information or the attribute measures, then termination of the standard should be considered.

While standards offer a number of important consumer benefits, there are some important costs. A standard which sets up a measuring system for a characteristic implicitly defines an "ideal" product--one which achieves the highest possible score on all dimensions of the measurement. Consider

^{7/} The slow process of education and acculturation may eventually create a market for newly measurable characteristics. However, it is also possible that there exists another standard or method of measurement which would better convey the information to the consumer and cause the consumers to alter their behavior.

the case of breakfast cereals. Prior to the FDA's method of measuring and displaying the nutritional content of foods, nutritionally sophisticated consumers used the content of the food's major vitamins and minerals to estimate the food's level of the 50 or so trace elements also needed for a balanced diet. However, once the nutrient values were made more available (and thus salient to a larger segment of the consuming public) many sellers reacted by fortifying their foods to more closely approximate the "ideal" product (as "defined" by the standard). This fortification not only negated the efficacy of the former method of assessing the total nutritional content of the food, but also led to more highly processed foods.

There are often trade-offs between enhancing the communication effectiveness of the standard and increasing the costs associated with the standard. The value of information is increased if sellers are required to estimate the value of the standard for each product (e.g., provide individual m.p.g. figures for each car) but so are the communication costs. Moreover, communication effectiveness is often improved by assigning descriptive adjectives or grades to various categories since these grades provide a frame of reference for evaluation (e.g., grade A is better than grade B) and are often easier to remember. However, there is a cost of using grading standards. First, verbal grading formats tend to "disguise" all of the individual bits of information subsumed in the grade. Exact numerical grading, while more complex, has the advantage of providing sellers with an incentive to make incremental product improvements. This lack of incentive can have important effects in cases where only small steps may add up to a very large change. Indeed, the change in the average tar content per cigarette has been only .9 percent per year since 1953, but

the cumulative reduction in tar has been significant (i.e., about 18%).

Another consideration for grading systems is that terminology should be consistent across different products. An example where this principle has not been followed is the USDA's grading system, in which U.S. No. 1 may be either best, second best or third best depending on whether the commodity is dried beans, lima beans or canned peas (Office of Technology Assessment 1972).

Required Disclosures. With public opinion turning against product bans, more attention has been devoted to informing consumers about the safety and performance of products, often under government-mandated affirmative disclosure requirements. In the previous section, it was recommended that standard setting should be considered because it represents a relatively low level of restriction on truthful speech and because the approach could spur competitive forces in the marketplace without much direct intervention. It was assumed that the standard measurement or definition would apply only if the seller chooses voluntarily to make particular performance claims; disclosure of specific information is not required.

Required disclosures are necessary when less draconian remedies have not or are unlikely to deal adequately with "information problems." There are two major forms of required disclosure that have been used extensively by government agencies: triggered and across-the-board disclosures. The former are used to prevent deception (if sellers say X, they must disclose Y), while the latter requires certain information in all ads or on product labels regardless of claim.

Triggered disclosures are required only if particular claims are made which would be misleading without the provision of qualifying information.

A triggered disclosure was used in the J. B. Williams case, for example, so that representations that Geritol prevents tiredness must now be accompanied by the disclosure that, in most situations, tiredness is not due to a lack of vitamins and iron and in those situations Geritol will be of no benefit (J. B. Williams 1967). FDA's nutrition labeling requirements are triggered when firms make voluntary nutrition claims in promoting their food products (FDA 1973).

Across-the-board disclosures are particularly appropriate when information concerns an entire product class. Often this information concerns negative aspects (e.g., warnings of product hazards) which are generic to the product class and thus no incentive exists for any firm to provide this information. For example, the health effects of cigarette smoking and side effects of consuming over-the-counter drugs is information which the market is unlikely to provide unless there are close substitutes without the drawbacks (e.g., aspirin vs. acetaminophen). It is unlikely, also, that many door-to-door sales firms (e.g., for encyclopedias) which do not rely on repeat business, would find it in their interest to notify potential customers that they are planning to solicit business (Encyclopedia Britannica 1976).^{8/}

While disclosure would appear to be less restrictive than simply prohibiting misleading claims, in some instances, disclosures may actually reduce the overall amount of information available to consumers. In general, disclosures increase the cost of communication. These costs include the direct compliance costs of delivering the message as well as the

^{8/}The FTC ordered Encyclopedia Britannica sales representatives to show at the outset of their sales presentation a 3" x 5" card which states, "The purpose of this representative's call is to solicit the sale of encyclopedias."

costs associated with the advertiser having to provide time or space it would rather use for other claims. For broadcast advertising, these compliance costs can be significant.^{9/} However, even a seller who is required to insert a disclosure in a "blank" space in a print ad incurs a cost since prior to the disclosure requirement, the seller had the option of using this space for another message. Finally, there is the cost of having the disclosure displace the provision of other information. This is especially true for broadcast since the time for the total message is fixed.

When only certain claims are subject to disclosure, advertisers may avoid the cost of the disclosure by making fewer of these claims. That is, advertisers may substitute unregulated claims, which carry no required disclosure, for regulated ones which must contain the disclosure. For instance, when Firestone was required to disclose the definitions of safety in their "Safe Tire" campaign they decided to abandon this type of message, thus reducing the information flow on the burdened attribute (Pittle 1976).

Sellers may also shift media as a result of mandatory disclosures. Under current government policies, disclosure requirements tend to fall more heavily on broadcast than on print media. An advertiser is typically able to "bury" required information in print advertising. Required disclosures in audio for radio commercials and in audio and video for television commercials (e.g., under Truth-in-Lending legislation) are more likely to occupy a significant portion of commercial time. This may

^{9/} For the first six months of 1979, the average cost of a prime-time 30-second commercial on national T.V. was \$54,000. The marginal cost of a disclosure in an ad during prime time is likely to be a lower (unknown) figure than the \$1,800 per second cost.

discourage the use of broadcast media thereby shifting advertising to less efficient vehicles (e.g., magazines or newspapers) for reaching certain audience segments.

It is difficult to evaluate the informational trade-offs presented by disclosures. If a claim alone, without the information in the disclosure, is so misleading that consumers would be better off with no information about the characteristic, then disclosures are clearly appropriate. Since iron supplements like Geritol are effective for tiredness in only limited situations, consumers may be better off with no information on this characteristic rather than a misleading claim that implies that the product will relieve tiredness for most people. On the other hand, the information that a food has "no cholesterol" may be useful to people who are seeking to avoid animal fat in their diet. Complex advertising disclosure, requiring inclusion of total fat, saturated fat, unsaturated fat and cholesterol content of the food, might make cholesterol claims less misleading, but it may also reduce the total number of these claims since communication costs are significantly increased (see proposed Food Advertising Rule, FTC 1974).

From a First Amendment standpoint, remedying misleading claims through disclosure rather than prohibition at first appears to be a relatively non-restrictive approach. For any particular claim, the words are not banned but are simply supplemented by additional information. Yet disclosure, if burdensome enough, is actually the functional equivalent of a ban.

In summary, there is an inherent conflict between avoiding consumer deception and maximizing the flow of truthful speech. A government agency must decide whether the total information environment would be improved by either eliminating particular misleading claims or by

requiring a disclosure which might result in reducing information flow. These alternatives should be contrasted to the solution of no intervention which would result in more information, some of which is deemed to be slightly misleading. In some situations, it might be better to require disclosure regardless of claim, and thus avoid the problem of advertisers evading disclosure by changing claims. However, this remedy is more restrictive and may not be appropriate for all types of deception.

Restricting Information Flow

The final category on the Continuum encompasses prohibitions on the dissemination of information which is judged as inherently confusing or deceptive. This includes restrictions on practices by a single seller or for all sellers in a given market. The former involves litigated cases, while the latter concern industry wide rule making efforts, which have the greatest potential both for achieving benefits and for producing costs.

In general, limitations on speech should only be used as a last resort when less restrictive remedies are unlikely to correct the marketplace problem. Prohibitions have the greatest potential for producing untoward side effects and should, therefore, be used with utmost caution.

There are two major types of information bans: on specific words and for particular audiences. Government agencies occasionally attempt to eliminate misleading terminology or words from the commercial marketplace. For example, FTC has proposed restricting "effectiveness" claims for over-the-counter drugs to those approved by FDA for use on labels (FTC 1976). It has also recommended banning the term "health food" in food advertising on the grounds that the phrase cannot be defined or qualified in any meaningful way (FTC 1974). The Agency should demonstrate that no other

less restrictive approach, such as a standard or disclosure, can be used to accomplish similar results.^{10/} Prohibitions reduce enforcement costs, but they can substantially impede communication to consumers and thus restrict marketplace reactions.

Overall, government agencies should use information bans primarily to excise demonstrably false information from the market. The FTC's proposed hearing aid rule, for example, prohibits blatant misrepresentations (i.e., that a hearing aid will "cure" or "arrest" hearing loss) (FTC 1975b). Excision of confusing or potentially deceptive claims is appropriate only when there is clear and convincing evidence that other remedies will be less effective.

In addition, vulnerable consumers such as children, the bereaved, or elderly persons with a hearing loss, may need the extra protection afforded by a prophylactic rule. These audiences can be declared "off limits" for certain selling methods because of inherent deception or unfairness. For instance, the FTC's proposed children's advertising rule suggests as one alternative that any television advertisement aimed at children too young to understand selling purpose should be banned because no amount of disclosure could remedy this particular unfairness (FTC 1978). However, extreme caution must be exercised in using these "last resort" approaches.

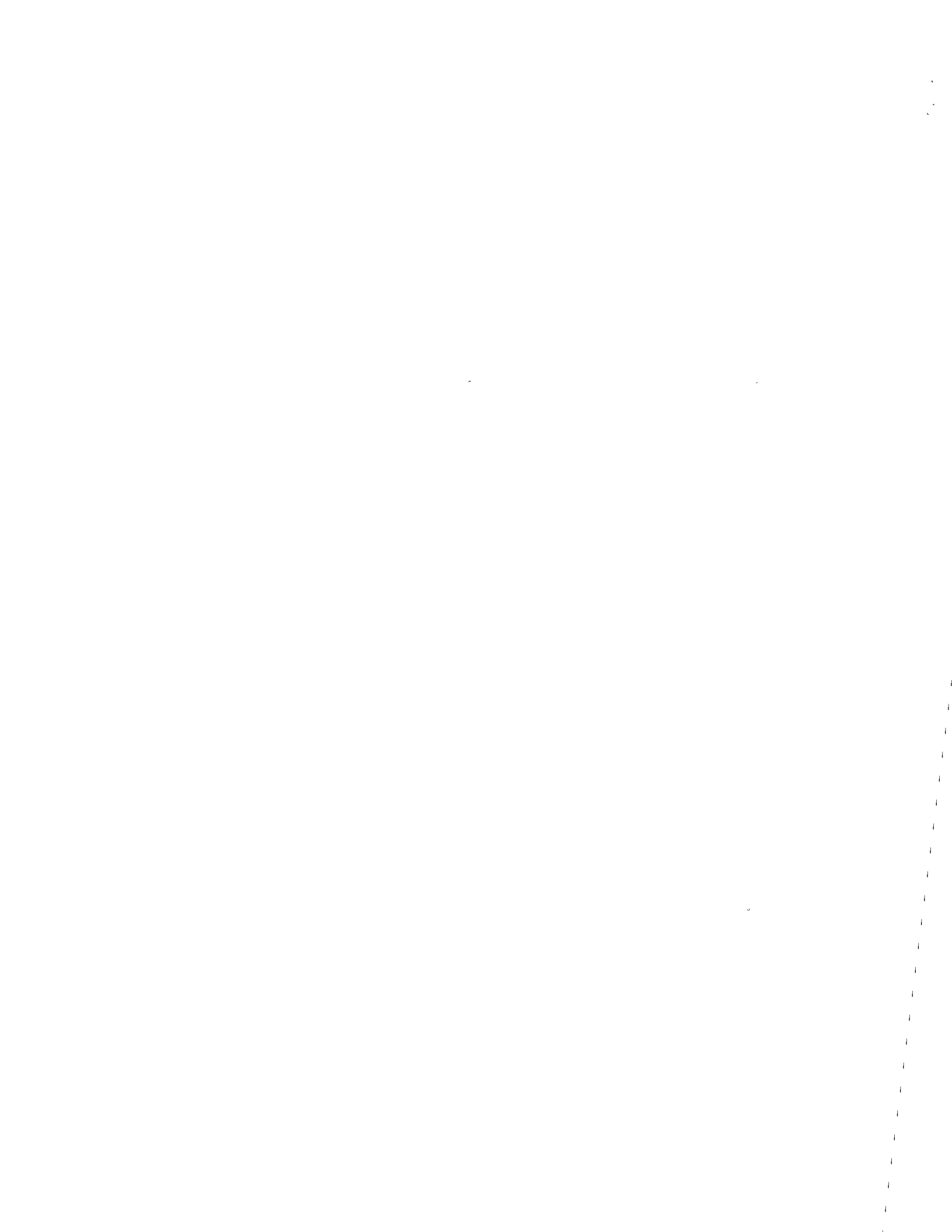
^{10/} There is apparently no First Amendment imperative for government agencies to favor the less restrictive disclosures versus a ban. The Supreme Court upheld a state-imposed ban on trade names for opticians because inherently meaningless trade names could deceive some consumers (Friedman 1979). This ruling would seem to overrule an opinion by the Third Circuit Court which had advocated that a "least restrictive alternative" approach be used -- i.e., that disclosures be preferred to prohibiting deceptive claims (Beneficial Corp. 1977). The Court's definition of "reasonable" deception remedies has not been fully explored, however.

Conclusions

Although no easy answers are provided concerning remedy selection, this article has argued for application of a few basic principles in the evaluation of any information remedy. It is suggested that the least restrictive remedies should be considered before turning to more restrictive ones. To this end, information remedies have been classified along a continuum which runs from the least restrictive to most restrictive.

A second basic concept in designing a remedy is the enhancement of benefits and reduction of the costs. In general, the benefit/cost ratio is increased by selecting remedies which are incentive compatible and which effectively communicate information to consumers.

The third major theme is that many benefits and costs associated with information regulation can be identified prior to rule enactment. Examples were provided to illustrate where information regulation can enhance consumer choice, improve product quality and lower prices. In an analogous fashion, instances where information remedies impose significant compliance costs, enforcement costs or costs associated with unintended side effects were discussed. In most cases, these costs can be predicted before instituting a remedy. Prior recognition of these costs might lead policy makers to select a more effective approach.



REFERENCES

- Bates v. State Bar of Arizona. 1977, 433 U.S. 350.
- Benham, Lee and Alexandra Benham. "Regulating Through the Professions: A Perspective on Information Control." Journal of Law and Economics 18, October 1975, pp. 421-447.
- Bettman, James. "Issues in Designing Consumer Information Environments." Journal of Consumer Research, December 1975, pp. 169-177.
- Breyer, Stephen. "Analyzing Regulatory Failure: Mismatches, Less Restrictive Alternatives and Reform." Harvard Law Review 92, January 1979, pp. 549-609.
- Bureau of Alcohol, Tobacco and Firearms (BATF). Industry Circular No. 76-2.
- Cohen, Dorothy. "Advertising and the First Amendment." Journal of Marketing 42, July 1978, pp. 59-68.
- Department of Health, Education and Welfare (DHEW). Report to the President and Congress on the Status of Health Professions Personnel in the United States.
- Encyclopedia Britannica, Inc., et al. 1976, 87 FTC 421.
- Enis, Ben M., Norman Kangun and Michael P. Mokwa. "Public Policy Development: A Marketing Perspective." Marketing News, February 24, 1978, pp. 2,4.
- Federal Trade Commission (FTC). "Advertising of Ophthalmic Goods and Services." Federal Register 43, June 2, 1978a, pp. 23992-23996.
- _____. "Advertising for Over-the-Counter Drugs." Federal Register 41, November 11, 1976, pp. 52631-52632.
- _____. "Cooling-Off Period for Door-to-Door Sales." Federal Register 38, November 19, 1973, pp. 31828-31830.
- _____. "Food Advertising." Federal Register 39, November 11, 1974, pp. 39842-39862.
- _____. "Funeral Industry Practices." Federal Register 40, August 29, 1975a, pp. 39901-39906.
- _____. Funeral Industry Practices, Final Staff Report to the Federal Trade Commission, June 1978b.
- _____. "Incandescent Lamp (Light Bulb) Industry." Federal Register 35, July 23, 1970, pp. 11784.
- _____. "Hearing Aid Industry." Federal Register 40, June 24, 1975b, pp. 26646-26651.

"Hearing Aid Industry." Federal Register 40, June 24, 1975b, pp. 26646-26651.

"Labeling and Advertising of Residential Thermal Insulation Materials." Federal Register 42, November 18, 1977, pp. 59678-59685.

"Rules for Using Energy Cost and Consumption Information in Labeling and Advertising of Consumer Appliances Under the Energy Policy and Conservation Act." Federal Register 43, July 21, 1978b, pp. 31806-31865.

Food and Drug Administration. "Nutrition Labeling." Federal Register 38, January 19, 1973, pp. 2125-2149.

Friedman, et al., V. Rogers et al. U.S. 99 Supreme Court. 887. 1979

Jacoby, Jacob, Donald E. Speller and Carol A. Kohn. "Brand Choice Behavior as a Function of Information Load." Journal of Marketing Research 11, February 1974, pp. 63-69.

Katz, Benjamin and J. and Jane A. Rose. "Information Utilization and the Awareness Criterion in Labeling Regulation," in Educators' Proceedings, Kenneth L. Bernhardt, ed., Chicago, Illinois: American Marketing Association, pp. 202-204.

Office of Technology Assessment. Perspectives on Federal Retail Food Grading, OTA-F-47, June 1977.

Ohralik, v. Ohio State Bar Association 36 U.S. 447. 1978.

"The Oregon Breakthrough: Reaction in Other States to Approval of 'Denturism' Ballot Initiative Crucial to Dentistry." Journal of American Dental Association 98, January 1978, pp. 146-147.

Pittle, R. David. "Advertising Product Safety," unpublished CPSC (Consumer Product Safety Commission) manuscript, 1975.

Russo, J. Edward. "More Information is Better: A Re-evaluation of Jacoby, Speller and Kohn," Journal of Consumer Research, December 1, 1974, pp. 68-72.

Salop, Steven. "Information and Monopolistic Competition." American Economic Review Papers & Proceedings 66, May 1976, pp. 240-251.

Staelin, Richard and John Payne. "Studies of Information Seeking Behavior of Consumers," in Cognitive and Social Behavior, Hilldale, New Jersey: Lawrence Erlbaum Associates, 1976, pp. 185-202.

Summers, John O. "Less Information is Better?" Journal of Marketing Research 11, November 1974, pp. 467-468

Virginia State Board of Pharmacy v. Virginia Citizens Consumer Council,
Inc. U.S. 96 Supreme Court 1817, 1976.

Wilkie, William L. "Analysis of Effects of Information Load." Journal
of Marketing Research, November 1974, pp. 462-466.

_____ and David M. Gardner. "The Role of Marketing Research
in Public Policy," Journal of Marketing 38, January 1974, pp. 38-47.

