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Regulation of Information and Advertising

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eception is the manipulation of information to gain some advantage. This paper considers commercial deception through advertising. The paper first discusses the economics of information. The literature has derived four major policy conclusions. First, truthful information regarding price should not be restricted by regulatory authorities. Second, deception is most likely and most harmful for credence goods, and regulation is most useful (if it is useful at all) for these goods. Third, truthful information should never be restricted. Fourth, regulation of advertising is best done by authorities that specialize in advertising, rather than by agencies with another mission. A fifth, more tentative, conclusion is that regulation should limit itself to statements that are actually false, and ignore those that are misleading or deceptive. The paper begins with a discussion of the First Amendment issues in regulating advertising. It then considers advertising of prices and regulation and types of goods. The next section examines regulation of true information about characteristics of goods other than price, with special reference to the U.S. Food and Drug Administration. The paper also discusses measures of deception and policies of mandating disclosure of negative information and remedies.

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### I. Introduction

"Deception" is the manipulation of information to gain some advantage. While people engage in deception in many dimensions for many types of advantage, here I will confine myself to commercial deception through advertising. To understand the economics of deception, I begin with the economics of information. There have been several major analyses of the implications of the economics of information for the regulation of deceptive advertising (e.g., Schwartz & Wilde (1979); Jordan & Rubin (1979); Beales, Craswell & Salop (1981); Rubin (1991); and Calfee (1997)<sup>1</sup>). The literature has derived four major policy conclusions. First, truthful information regarding price should not be restricted by regulatory authorities. Second, deception is most likely and most harmful for "credence" goods, and regulation is most useful (if it is useful at all) for these goods. Third, truthful information should never be restricted. Fourth, regulation of advertising is best done by authorities that specialize in advertising, rather than by agencies with another mission. A fifth, more tentative conclusion, is that regulation should limit itself to statements that are actually false, and ignore those that are "misleading" or "deceptive".

I begin with a discussion of First Amendment issues in regulating advertising. In the following two sections, I discuss advertising of prices and regulation and types of goods. The next section examines regulation of true information about characteristics of goods other than price, with special reference to the U.S. Food & Drug Administration (FDA). Section V addresses measures of deception and policies of mandating disclosure of "negative" information. Section VI discusses remedies, and last, Section VII summarizes the paper and the policy conclusions reached. The economic literature on advertising is voluminous, and I mention only those parts which are relevant to issues of deception.<sup>2</sup>

First, I introduce some institutional background. There are at least five sources of regulation of advertising: The Federal Trade Commission (FTC); other feder-

<sup>1</sup> This paper is an extension and updating of Rubin (1991), and many additional references may be found there. See P. Rubin, *The Economics of Regulating Deception*, 10(3) Cato J. 667-90 (Winter 1991). A very important excellent general source is J. Calfee, Fear of Persuasion: A New Perspective on Advertising & Regulation (1997).

See also A. Schwartz & L. Wilde, Intervening in Markets on the Basis of Imperfect Information: A Legal and Economic Analysis, 127 U. Penn. L. Rev. 630-82 (1979); E. Jordan & P. Rubin, An Economic Analysis of the Law of False Advertising, 8 J. Legal Stud. 116-55 (June 1979), reprinted in P. Rubin, Business Firms & The Common Law, Praeger (1983); H. Beales et al., The Efficient Regulation of Consumer Information, 24 J.L. & Econ. 291-539 (1981).

<sup>2</sup> For some more general surveys, see W. Comanor & T. Wilson, The Effect of Advertising on Competition: A Survey, 17 J. Econ. Lit. 453-76 (1979); R. McAuliffe, Advertising, Competition, & Public Policy: Theories & New Evidence (1987); R. Ekelund, Jr. & D. Saurman, Advertising & the Market Process (1988); and Kyle Bagwell, The Economic Analysis of Advertising, in Handbook of Industrial Organization 3, ch. 28 (M. Armstrong & R. Porter, eds. 2007). This survey is quite extensive, but does not consider deception.

al agencies, such as the FDA and the Securities and Exchange Commission (SEC); state attorneys general; industry self-regulation, under the auspices of the National Advertising Review Board (NARB) or the National Advertising Division (NAD) of the Council of Better Business Bureaus; and private civil litigation under the Lanham Act and other statutes or common law doctrines. Of all these regulatory bodies, the FTC is now the only organization with responsibility for advertising regulation that explicitly considers economics in its decision making. The extent to which the FTC does rely on economics may come as a surprise to some who are not familiar with the internal workings of the agency. There are about 15 economists assigned to consumer protection, and from 2001 to 2005, an economist, not an attorney, was the Director of the Bureau of Consumer Protection at the FTC—the highest position in the FTC's consumer protection mission. Economists examine all advertising cases at the FTC and have the option of making independent recommendations to the Commission. While the level of participation varies with the regime, nonetheless, economists

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do participate in all cases. There is an equally strong role for economics in rulemakings, and the inputs of the economists, including cost-benefit analyses, are part of the public record for these proceedings.

To the extent that it is efficient to regulate advertising, it is desirable to have economic input into the process. Therefore, one recommendation is that either the other regulatory bodies should

adopt a more explicit use of economics or the FTC should be given more responsibility for such regulation. In what follows, I will from time to time indicate ways in which FTC regulation differs from regulation by other agencies. However, I should note that I generally do not discuss the SEC and other regulations of financial information. I also confine my analysis to government regulation.<sup>3</sup>

# II. Constitutional Issues in Regulating Information

An excellent economic analysis of First Amendment issues in advertising regulation of is McChesney (1997) and I borrow heavily from his analysis.<sup>4</sup>

<sup>3</sup> For a discussion of private self-regulation, see Calfee (1997), supra note 1.

<sup>4</sup> See F. McChesney, De-Bates and Re-Bates: The Supreme Court's Latest Commercial Speech Cases, 5
SUP. CT. ECON. REV. 81-139 (1997). For a useful legal analysis, see U.S. Federal Trade Commission,
Comments of the Staff of the Bureau of Economics, The Bureau of Consumer Protection, and The
Office of Policy Planning of the Federal Trade Commission Before The Department of Health and
Human Services, Food and Drug Administration, in the Matter Of Request for Comment on First
footnote 4 cont'd on next page

Advertising is a form of "commercial speech." Although the First Amendment to the U.S. Constitution does not distinguish types of speech ("Congress shall make no law ... abridging the freedom of speech, or of the press..."), nonetheless, until 1976 there was no constitutional protection for commercial speech. In that year, in a case involving advertising of eyeglasses in Virginia, the U.S. Supreme Court gave some protection to advertising that was truthful and not misleading. Their reasoning was explicitly economic: advertising would lead to lower prices for consumers. In a 1977 case involving attorney advertising in Arizona, the Court strengthened its economic arguments.

The current standard for advertising regulation is the four-part "Central Hudson Test." First, commercial speech is not protected by the First Amendment if it concerns unlawful activity or is misleading. Second, if the commercial speech concerns lawful activity and is not misleading, the court will determine "whether the asserted governmental interest is substantial." Third, if the interest is substantial, the court "must determine whether the regulation directly advances the governmental interest asserted." Fourth, the court must determine "whether [the regulation] is not more extensive than is necessary to serve that interest." To survive a First Amendment challenge, a regulatory agency of the government has the burden of proving that its restriction on commercial speech satisfies the Central Hudson test. Note that the government has the burden of proof under this test. FTC regulation has generally been accepted by the courts as meeting this test. Some regulations of commercial speech (including some by the FDA) have not survived legal challenge; in the past, the FDA has asked the FTC for guidance on this issue.<sup>6</sup>

## III. Regulation of Price Advertising

"Deceptive pricing" is the advertising of prices which are not actually common transaction prices. Ads like "Regularly \$50, now \$25" or "\$50 elsewhere, here \$25" might be considered deceptive unless "enough" sales had occurred at the \$50 price, where enough can be defined in various ways. The FTC seldom if ever brings deceptive pricing cases, and has not for many years. This is because the Commission generally recognizes that any advertising that stresses prices is likely to ultimately lead to lower prices for consumers. However, as discussed later in this article, the FTC still has in place "FTC Guides Against Deceptive Pricing."

footnote 4 cont'd

Amendment Issues, Docket No. 02n-0209 (Sep. 13, 2002). See also Hugo Mialon & Paul H. Rubin, The Economics of the Bill of Rights, Am. L. & Econ. Rev. (forthcoming 2008).

- 5 See L. Benham, The Effect of Advertising on the Price of Eyeglasses, 15 J.L & Econ. 337-53 (1972).
- 6 See U.S. Federal Trade Commission (2002), supra note 4.
- 7 For a good analysis of these issues, see Calfee (1997), supra note 1, at ch. 7.

If a product usually sells for \$25 and the firm advertises it as being normally \$50, on sale for \$25, this ad will have no immediate benefits. Consumers are not given any new options, since \$25 is the normal price. This is why such ads are sometimes challenged as being deceptive. Nonetheless, the process started by this ad may ultimately lead to lower prices for consumers. Price conscious consumers will be drawn to this firm since it is stressing price in its ads, and all consumers will be given some information about the distribution of prices in the marketplace. Other firms will be forced to respond to the ad, and some will respond by actually lowering prices below their current level, in part because of the price competition started by the information conveyed in the ad. Ultimately, even the firm initially advertising a price of \$25 may be forced to sell for \$20 as price advertising spreads throughout the industry. On the other hand, if the ad is initially stopped as being "deceptive", information about low prices is less likely to spread.

One general point that will recur in the analysis is that in analyzing advertising it is important to distinguish markets in equilibrium from those which are not. For a market to be in disequilibrium implies some informational failure, and advertising, by providing information, can move markets towards equilibrium.8 For example, a market may be in disequilibrium with prices above equilibrium. Advertising may be an effective method of moving from the high-priced disequilibrium to the low-priced equilibrium. During the transition some ads may appear deceptive, but stopping these ads may have the effect of retarding the movement toward the new equilibrium. Schwartz & Wilde (1979) indicate that high-price equilibria are unstable, so that advertising of better prices or terms can destroy a "monopoly" equilibrium in an industry. A second point is that examining one ad in isolation is an undesirable policy. Because consumer attention is limited, an advertiser might provide information in a series of short ads. Moreover, advertisers respond to each other's ads, and so the ultimate effect of an ad campaign might be very different from the apparent effect of a single ad viewed alone.

There is no evidence that price advertising deceives consumers. Moreover, even if some comparative price advertising deceives some consumers, the costs of limiting or forbidding such advertising are likely to be substantial. For example, consider the issue of the volume of sales that must occur at some price before it can be advertised as the "regular" or "normal" price, a common feature of attempts to regulate deceptive pricing. A firm might engage in predictable seasonal promotions, such as sales of tires or white sales of household furnishings. If consumers know that such sales occur, they will generally not buy except during the sale period. Thus, there will be relatively few units sold at "regular" prices, although these prices may be commonly available. In such circumstances, any attempt to limit

<sup>8</sup> See Ekelund & Saurman (1988), supra note 2.

<sup>9</sup> See Schwartz & Wilde (1979), supra note 1.

advertising would have one of two effects. The firm might be forced to offer less frequent specials so that more items would be sold at the normal price, a course of action that would clearly harm consumers. Alternatively, it might stop advertising the regular price, but if, for example, this price is comparable to other prices in the market, then consumers would be denied valuable information.

In addition, even if consumers are deceived, there is no evidence that they are harmed. In one experimental study that did find consumers deceived by price ads, it was nonetheless found that there was no measurable injury even to those consumers who were deceived. Interestingly, the authors attribute their results regarding deception in part to the fact that their subjects may have believed that it is illegal to exaggerate reference prices, and that the law is strictly enforced. This indicates that incomplete enforcement of deceptive pricing laws may actually be harmful. If consumers are normally skeptical of such ads, then they cause little if any injury. However, partial enforcement may lead consumers to overestimate the level of enforcement and relax their normal skepticism. This will be particularly likely if there is wide publicity given to the few enforcement efforts

that do occur. This is itself likely, given the political orientation of many state enforcement officials, who tend to bring such cases.

The basic problem with policies against deceptive pricing is that in general it is discount firms and firms stressing price that engage in these promotions. As a result, any effort to limit such advertising is likely to lead to higher prices in the market. As Robert Pitofsky, a former Chairman of the FTC and generally an advocate of rigorous enforcement of consumer protection regulations, has argued, "as long as consumers are accurately informed of the offering price,

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they can make sensible decisions, and the transactions may still be at prices lower than could be obtained at most other outlets in the marketing area." Pitofsky views reduced enforcement of deceptive pricing claims as a gain for consumers. This is especially true since the possible gains from such enforcement are doubtful and speculative, while the costs are obvious and substantial.

The FTC seldom brings deceptive pricing cases. For example, when asked by the NAD to examine jewelry pricing by J.C. Penney, the FTC ultimately declined to do so. However, the states still do. An example is a 2000 case brought by the

<sup>10</sup> See J. Urbany et al., The Effect of Plausible and Exaggerated Reference Prices on Consumer Perceptions and Price Search, 15 J. Consumer Res. 95-110 (1988).

<sup>11</sup> See R. Pitofsky, Beyond Nader: Consumer Protection and the Regulation of Advertising, 90 HARV. L. REV. 661-701, 688 (1977).

Attorney General of Vermont regarding "rent-to-own" companies. Moreover, a Google search of "deceptive pricing" finds that the FTC guidelines are still important. Many trade associations (particularly in the jewelry industry) warn members against deceptive pricing based on these guides. Of course, trade associations have an interest in maintaining high prices for members, and price advertising (whether "deceptive" or not) leads to reduced prices, benefiting consumers but harming sellers. Therefore, it is not surprising that trade associations try to convince members not to engage in price advertising. Many law firms also post notices about these guides, presumably in the hope of generating business from firms that want to avoid punishment for violation. If the FTC is serious about not enforcing these rules because of their harm to consumers, then they should consider repealing their guidelines, rather then merely failing to enforce them.

# IV. Regulation and Types of Goods

A public authority charged with advertising regulation has a substantial amount of discretion. The nature of language is such that almost any claim could be interpreted as being deceptive or misleading under some readings, so that there are many cases which could be brought.<sup>12</sup> In addition, most cases brought by the government are settled through consent decrees (a procedure under which the firm does not admit to wrongdoing, but promises to cease the challenged conduct), so that there is little litigation over the issue of deception. This may be because of the high reputation cost to a firm from being named as engaging in "deception".<sup>13</sup> Mathios & Plummer (1989) find that firms that contest FTC orders end up with greater capital losses than firms that consent without a contest.<sup>14</sup> Since few cases are contested, it is important for regulatory officials to have a strong theoretical basis for bringing some cases and not others. Economics provides this theoretical basis. Economists argue that the basis for regulation should be the effect of claims on consumer welfare, and economics provides a framework for determining which types of ads are most likely to reduce consumer welfare.

Economic analysis suggests that there are three types of characteristics of goods with respect to advertising. These are called "search", "experience", and "credence" characteristics. <sup>15</sup> Search characteristics can be determined before the

<sup>12</sup> See R. Craswell, Interpreting Deceptive Advertising, 65 Boston Univ. L. Rev. 658-732 (1985).

<sup>13</sup> See S. Peltzman, The Effects of FTC Advertising Regulation, 24 J.L. & Econ. 403-48 (1981).

<sup>14</sup> See A. Mathios & M. Plummer, *The Regulation of Advertising by the Federal Trade Commission:*Capital Market Effects, in 12 RESEARCH IN LAW & ECONOMICS 77-93 (Richard O. Zerbe ed., 1989).

<sup>15</sup> For the discussion of search and experience goods, see P. Nelson, *Advertising as Information*, 82 J. Pol. Econ. 729-54 (1974) and P. Nelson, *Information and Consumer Behavior*, 78 J. Pol. Econ. 311-29 (1970). For credence goods, see M. Darby & E. Karni, *Free Competition and the Optimal Amount of Fraud*, 16 J.L & Econ. 67-88 (1973). For an application to regulation of advertising, see Jordan & Rubin (1979), *supra* note 1.

associated goods are purchased; an example is the color of a suit. Goods must be purchased and used before experience characteristics can be evaluated; an example is the cleansing power of a bar of soap. For credence characteristics, the consumer may never know if the characteristic exists, even after purchase; an example is unnecessary repair to a TV (or unnecessary surgery), for the TV (or the body) will work afterwards even if the repair was unneeded.

Given this classification, some principles of regulation of advertising are instantly obvious. First, for search characteristics, there is no need for regulation. Consumers can determine if the good has the advertised characteristic, and cannot be deceived. Moreover, since this is so and firms understand that it is so, there is no incentive for deceptive advertising with respect to these characteristics. Transaction price is a search characteristic (i.e., consumers will know the transaction price before purchase), which is why regulation of advertising of transactions prices, discussed earlier, is unneeded and counterproductive. Second, for inexpensive goods, there is little cost to deception about experience characteristics. The consumer will be deceived at most one time about such goods, and so in general losses will be small. Regulators should concentrate on relatively expensive experience goods and particularly on credence goods.

This analysis has additional implications. In particular, it points to the importance of reputation as a protection against deception and to the importance of advertising in generating a reputation. <sup>16</sup> Economists had long been puzzled by apparently non-informative advertising. Nelson showed that in certain circumstances the very existence of advertising would itself provide information. <sup>17</sup> Advertising would only be worthwhile if it led to repeat sales for experience goods, but firms could expect repeat sales only if the product were of sufficiently high quality. Therefore, the willingness of a firm to spend money on advertising would itself provide information to the market that the firm expected repeat sales because it believed that its products were of high quality.

Problems of assuring or guaranteeing quality arise in many markets. The problem was first analyzed by George Ackerlof in his 1970 Nobel Prize-winning article dealing with "lemons", as the term is used in the used car market. A lemons market is defined as a market that fails because only low quality items are sold, even though consumers would be willing to pay high prices for high quality items. Three conditions are necessary to generate a lemons market. First, consumers must be unable to determine quality before purchase. Second, higher quality goods must cost more to produce than lower quality. Finally, there can

<sup>16</sup> See P. Rubin, Managing Business Transactions, ch. 8 (1990).

<sup>17</sup> See P. Nelson (1974, 1970), supra note 15.

<sup>18</sup> See G. Ackerlof, The Market for Lemons: Qualitative Uncertainty and the Market Mechanism, 84 Q.J. Econ. 488-500 (1970).

not be a credible way for a firm to guarantee quality. If these three conditions are met, then the market mechanism may break down. This will happen because no firm will be able to convincingly promise high quality items. As a result consumers cannot be sure of getting the higher quality and so will not pay the higher price for higher quality items. Thus, even though consumers would be willing to pay a higher price for more quality and firms would be willing to sell higher quality items for prices consumers would be willing to pay, there is no effective way in which this desire can be satisfied. It is in this sense that the market may malfunction.

The lemons problem identified by Ackerlof exists only if firms cannot convincingly communicate to consumers the quality of their products. If firms can produce high quality products and convince consumers that they are doing so, then the market failure disappears. There is a substantial literature devoted to the economics of information which demonstrates ways in which markets can and do solve the problem.

Klein & Leffler (1981) explicitly related Nelson's discussion of advertising to Ackerlof's lemons problem. They showed that the mechanism identified by Nelson and related mechanisms could be used to solve the lemons problem. Investments in non-salvageable firm-specific capital (capital which would become worthless if the firm were to shut down) would serve to guarantee quality since the firm would lose the value of these investments if consumers dissatisfied with low quality products forced it to shut down by withdrawing patron-

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age. Besides advertising (including endorsements by celebrities) such capital includes investments in establishing trademarks and brand names, and in physical assets, such as signs and decor. Generalizations to the analysis were provided by Shapiro (1983) and many others.<sup>20</sup> Lynch, Miller, Plott & Porter (1986) provided an experimental test of these models.<sup>21</sup>

They found that it is possible to generate lemons markets in laboratory settings, that truthful advertising will eliminate problems associated with such markets, and that reputations will sometimes serve to eliminate these problems.

One potential function of agencies regulating advertising is to prevent firms from exploiting this brand name capital. For example, a firm might suffer busi-

<sup>19</sup> See B. Klein & K. Leffler, *The Role of Market Forces in Assuring Contractual Performance*, 89 J. Pol. Econ. 615-41 (1981).

<sup>20</sup> See C. Shapiro, *Premiums for High Quality Products as Returns to Reputation*, 98 Q.J. Econ. 659-79 (1983).

<sup>21</sup> See M. Lynch et al., *Product Quality, Consumer Information and 'Lemons' in Experimental Markets, in* Consumer Protection Economics 251-306 (P. Ippolito & D. Scheffman eds., 1986).

ness reverses and plan on leaving a market. However, if the firm has established a reputation in this market, it may be worthwhile for the firm to draw down this reputation capital by offering relatively shoddy goods and thus implicitly deceiving consumers. It might be worthwhile for regulatory agencies to police the market to prevent this sort of behavior, although by the time the deception is detected the firm may have exited.

Once it has been decided to confine analyses to particular types of ads and product characteristics, however, the problem is not solved. Many deceptive ads will deceive some and inform others. Therefore, a balancing test of some sort is required to determine if a case is worth bringing. An economic analysis of deception has provided exactly this sort of balancing test: "An advertisement is legally deceptive if and only if it leaves some consumers holding a false belief about a product, and the ad could be cost-effectively changed to reduce the resulting injury." This criteria for deception says that an ad is deceptive only if the costs of changing it are less than the benefits. Included in the cost of changing the ad is any information lost by those consumers who were not deceived by the initial ad and who would find a proposed substitute less informative. This cost-benefit criterion is a useful guideline for exercise of prosecutorial discretion, and is based on an explicitly economic analysis.

A related issue is the "burden of proof" for regulation. At one time, the FTC had the burden of proof; that is, the FTC had to prove that an ad was false or misleading. In about 1983, the agency has adopted an "advertising substantiation" policy: a firm must have adequate substantiation for an ad. This has essentially shifted the burden of proof from the agency to prove falsity to the advertiser to prove truth.

# V. True Claims About Characteristics Other Than Price: The FDA

The FTC generally allows any advertising which is truthful, with only a few exceptions, such as mandated disclosure, discussed later. The FDA, on the other hand, greatly restricts even truthful advertising. This is part of the general problem with regulating advertising by an agency whose primary responsibility is health regulation. As Calfee (1997) points out, health agencies have several deficiencies in regulating advertising. First, they tend to overestimate the power of advertising. Second, they also underestimate the benefits of advertising, because they do not perceive the ongoing process whereby advertisers respond to each other and collectively generate more information than is available from any

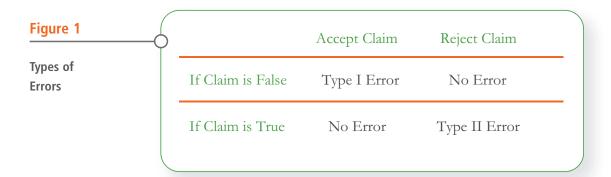
<sup>22</sup> See Craswell (1985), supra note 12, at 657.

<sup>23</sup> See Calfee (1997), supra note 1.

one ad. Third, they impose restrictions on advertising that are not related to the way in which consumers perceive or use advertising. Finally, these agencies have more power than agencies that regulate only advertising. The FDA has the power to approve or disapprove drugs. Therefore, firms advertising drugs are unwilling to challenge the FDA's advertising regulations in court to the extent that would occur if the FTC, with no additional power, tries to impose irrational or counterproductive policies on advertising. These points can be best understood if we examine some actual FDA policies. I begin with a discussion of FDA decision making in the face of uncertainty.

#### A. REGULATION OF UNCERTAIN CLAIMS

We begin with some claim that may or may not be true. Then there are two possible errors that a regulator can make. One error can occur if the claim is false and producers are nonetheless allowed to make the claim. That is, a decision maker (here, the FDA) might err by allowing a false claim. This error is called a "Type I" error. On the other hand, the agency might err by not allowing a true claim. That is, if the claim is actually true but the regulator does not allow producers to make the claim, then this is also an error. This is called a "Type II" error. The possibility of these errors exists for any decision problem; there is no way to avoid the possibility. Statistical decision theory helps us manage the two types of errors, but it cannot eliminate them. The two types of errors are illustrated in Figure 1.



The structure of a decision problem is such that if we use a decision procedure that reduces the chance of committing a Type I error, then we necessarily increase the chance of committing a Type II error. That is, if the decision maker tries to be more certain that no one makes any false claims (for example, by requiring a higher standard of proof), then the decision maker also increases the probability that producers are forbidden from making some true claims. For example, if the FDA requires proof of a nutrient-disease relationship to a near certainty before a producer is allowed to make a health claim for some substance, then many true claims for substances will not be allowed.

There is no "solution" to the general problem: for a given amount of information, anything that reduces the probability of one error increases the probability of the other. This trade-off is inherent in the problem, and cannot be removed. The only way to reduce the chance of both types of errors is to gather more data. However, even this is not a solution. First, during the time when data is being gathered or research is being conducted, useful information about a product's possible utility is not available to consumers. Second, in some circumstances it will not pay for anyone to gather the additional information. This will occur when a product cannot be patented or is off patent; here, no one will find it worthwhile to spend the resources to prove a claim even if everyone believes it to be true. It may also be true a market is small enough so that the value of the additional information is simply less than its cost—particularly since the FDA requires substantial testing to approve a claim.

Rational policy making would minimize the total expected costs of the two types of errors. Let  $P_1$  and  $P_2$  be the probabilities of each type of error (determined by the agency's policy) and let  $C_1$  and  $C_2$  be the costs of each error. Then the agency should try to choose  $P_1$  and  $P_2$  to minimize the sum of the expected costs:  $P_1C_1 + P_2C_2$ .  $C_1$  is the cost of a Type I error—that is, allowing a claim if it turns out to be false. There are two situations in which a Type I error could have a high health cost. One is if the substance is actually harmful, so that taking the substance itself actually causes health problems. The other situation is one in which there is a better treatment available and consumers instead use a less beneficial remedy. If neither of these situations holds, then the main cost of a Type I error is the money that the consumer might spend for a product with few or no benefits. The health cost of a Type II error is the foregone health benefits of the product if the claims actually are true. That is, the health cost is that the con-

sumer might suffer a loss of health benefits that would otherwise be experienced if purchases were made based on the claim.

Thus, it is very important to note that for a substance with no good substitutes and with no harmful effects the trade-off is between a reduced chance of suffering from some condition and spending some money on a substance that might not help. This is not an issue that a health authority can decide. It is instead an issue of personal choice. If the consumer has valid informa-

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tion about the probability that the substance is helpful, then in a market economy it is proper that the consumer decide if the expected benefit is worth the cost. Rational policy would then serve to give the consumer the information needed to make the appropriate decision. There is no sound justification for denying the information to the consumer.

The FDA traditionally places a very high value on not committing a Type I error. That is, the FDA almost always tries to be sure that no one makes a false claim by requiring a very high degree of certainty before it allows a claim to be made. But this high level of certainty means that many Type II errors will be made. That is, by requiring a high degree of proof to avoid Type I errors, the FDA forces a situation in which there are too many Type II errors. (The agency acts as if  $C_1$ , the cost of a Type I error, is higher than it actually is. This may be because the political cost to the agency itself of a Type I error is very high.) A Type II error is a failure to make a true claim. Therefore, the result of the FDA's decision strategy is that many true claims (which would provide consumer benefits) will not be made, and so consumers will be denied the benefits of the associated products. The mistakes the FDA makes in restricting information and not allowing true and useful claims are systematic, not random. In all cases that have been studied, the FDA has been overly restrictive in allowing claims. I discuss examples of this decision making below.

#### B. HISTORICAL EXAMPLES OF FDA DECISION MAKING

In general, the FDA puts too much weight on not allowing a false claim and so refuses to allow many beneficial true claims. I show this about three particular episodes—health claims for foods, direct-to-consumer advertising of prescription drugs, and advertising of "off-label" uses of approved drugs. In all cases, the FDA was excessively restrictive. (Other examples, not discussed in this paper, include some true claims for over the counter drugs, such as claims about the ability of aspirin to reduce first heart attacks, and claims regarding dietary supplements, an issue over which the FDA lost a First Amendment challenge.)

#### 1. Health Claims for Foods

Traditionally, the FDA did not allow producers to make health claims for foods.<sup>24</sup> The argument was that if such claims were made, then the food was being marketed as a drug, and the manufacturer was required to have the food go through the new drug approval process. As a result, there were no health claims for foods. For example, for many years after significant scientific evidence of the harmful effect of high dietary cholesterol and saturated fats had been published, the FDA would not even allow food companies to state that their products contained little or no cholesterol or saturated fat.

In 1984, the Kellogg Company and the National Cancer Institute (NCI) jointly began an advertising campaign aimed at selling Kellogg's All-Bran and also at informing consumers of the health benefits of fiber, a message the NCI had had little success in spreading. The FDA attempted to stop this ad campaign, using the usual argument that the health claim meant that the product should

<sup>24</sup> For a history, see id.

undergo the new drug approval process. However, the FTC intervened, and ultimately the FDA backed down and allowed the advertising. Advertising of the health benefits of fiber led to remarkable results. Consumers learned about the benefits of fiber, and this learning was more important for lower income and less educated consumers, who had not benefited from the NCI information programs. Moreover, manufacturers began to formulate additional brands with fiber. Manufacturers began to advertise that their products were high in fiber and also low in sugar and salt. There was also an explosion of research regarding foods and health, and of more health claims and information about other products. The promotion led manufacturers to reformulate products to improve their health characteristics.

Thus, this episode illustrates four relevant points. First, the FDA was hostile to health claims advertising, and for many years suppressed this form of information. Second, when the FDA strictures were relaxed, there was a tremendous increase in the amount of consumer information available. Third, the ability to publicize health claims caused manufacturers to reformulate products and to do research on other health properties of foods. Fourth, advertising the health benefits of these healthier foods led consumers changing their diets to eat more of the healthier foods and less of the foods most likely to cause serious health problems. The FDA's pre-1984 policies caused tremendous harm to health of American consumers. A recent comprehensive study shows that health claims rise and fall with changes in regulation, and provide substantial benefits when they are allowed.<sup>26</sup>

#### 2. Direct-to-Consumer (DTC) Advertising of Prescription Drugs

Before 1981, there was little if any DTC advertising.<sup>27</sup> Some firms began such advertising in the early 1980s. In response, the FDA declared a moratorium on such advertising in 1983. After seeking public comment, the FDA lifted its ban in 1985. However, the form of the regulations was such that there was almost no advertising of pharmaceuticals on television. If an ad indicated both the name of the drug and the condition for which it was to be used, then a "brief summary" (brief only by bureaucratic standards) was required, and it was difficult or impossible to put the brief summary on television. Thus, there were ads listing a condition (e.g., "See your doctor for new remedies for baldness") but no drug, or ads naming drugs (e.g., "Try Rogaine"), but no condition.

<sup>25</sup> See P. Ippolito & A. Mathios, Information, Advertising and Health Choices: A Study of the Cereal Market, 21(3) RAND J. Econ. 459-80 (1990).

<sup>26</sup> See P. Ippolito & J. Pappalardo, Advertising, Nutrition & Health: Evidence from Food Advertising, 1977-1997, U.S. Federal Trade Commission, Bureau of Economics Staff Report (2002).

<sup>27</sup> For a history, see J. Thomas, *Direct-to-Consumer Pharmaceutical Advertising: Catalyst for a Change in the Therapeutic Model in Psychotherapy?*, CONN. L. REV. 209-48 (Fall 2000).

In 1997, the FDA changed its policy and began to allow DTC advertising on television. As a result, the amount of such advertising has greatly increased. This advertising has provided substantial health benefits—benefits that were denied to consumers for many years by the FDA's previous policy of effectively forbidding such advertising. Analysis of DTC advertising has identified several health benefits. It might appear that physicians have enough information to prescribe drugs for consumers, but there are cases where consumers have information about themselves that may not be available to a physician. This may be because patients do not tell physicians all relevant information, either because they do not know that it is relevant or for other reasons, or because some potential beneficiaries of medication are not in contact with a physician. Thus, benefits accrue because consumers will have some information about themselves that is not readily accessible to a physician. The information known only to individual consumers about their own health status can be combined with information in pharmaceutical ads to better match patients and drugs. Of course, the physician also has information about pharmaceuticals, and has the final say in prescribing decisions.

We may identify several types of benefits from direct advertising.<sup>28</sup> A consumer may suffer some symptoms (e.g., thirst) without realizing that these are symptoms of a disease (e.g., diabetes). A consumer who does not realize that symptoms indicate a disease will not consult a physician and so cannot learn in this way that he has a treatable disease. Ads have informed consumers that urinary problems may be symptomatic of prostate enlargement, and that there is a non-surgical treatment for this condition. Ads discuss the symptoms of depression.

Advertising can inform a consumer that a treatment exists for some condition. A consumer might know that he has the condition, but not know that there is a treatment. Because the consumer believes that the disease is not treatable, or because previous remedies have been ineffective, he will not contact a physician and will not learn about the new therapy. Advertising tells those who suffer from migraine that there is a new treatment. This class of advertising is becoming and will continue to become more important as the rate of introduction of new therapies increases.

Ads can warn consumers about conditions with no overt symptoms. Ads for anti-cholesterol drugs warn consumers of the dangers of high cholesterol. Such ads may be very useful. Several studies have shown that this class of drugs can reduce cardiac deaths by 24 percent to 42 percent. Only about one-third of the 13 million Americans with heart disease symptoms are now treating it with anti-cholesterol drugs, and an additional 16 million with no symptoms but with significantly elevated cholesterol levels are not being treated. Advertising can induce many of these people to seek medical care. After advertising for these drugs began,

<sup>28</sup> For the first article identifying some of these benefits, see A. Masson & P. Rubin, *Matching Prescription Drugs and Consumers*, 313 New Eng. J. Med. 513-15 (1985).

8.8 million people sought treatment in 1997 for cholesterol-related therapies, up from 7.2 million in 1996, perhaps in part because of an ad campaign.

Advertising can alert consumers to a new remedy with reduced side effects that has become available. In this example, advertising can provide benefits in two ways. Consumers who do not know that symptoms they are experiencing are side effects, and so would not ask a physician about them, may learn from ads that there are alternatives without these side effects. Consumers who have stopped treatment because of side effects, and so are not seeing a physician, may start treatment again if they learn of therapies that do not impose the same side effects. Either class of consumers can benefit from ads indicating that a treatment with reduced side effects is available.

Ads can inform consumers simply that a medication is available that is more convenient than existing medications. A physician might not be aware that the less convenient form is a problem for a particular consumer, and so might not suggest the other form of the medicine. Alternatively, a consumer might have stopped using the medication because of the inconvenience, and so not be in contact with a physician at all. Learning of the more convenient form can then induce the consumer to see a physician and re-enter treatment. Patient non-compliance with physician prescriptions is a serious medical problem, and this class of ads can alleviate this problem.

Advertising can inform consumers that some conditions are medically treatable. Consumers might not think of conditions treated by some medicines as medical, or might not know of the availability of treatments. A leading example is the advertising of Viagra, the impotence remedy. Other examples include ads for hair loss treatments and for aids in smoking cessation.

Some patients may be embarrassed to discuss some conditions with a physician. In an ad for Viagra, former presidential candidate Robert Dole is quoted as saying "It may take a little courage to ask your doctor about erectile dysfunction." These ads and others may induce consumers more generally to be willing to discuss certain conditions with friends and family members as well as with physicians.

These benefits are now available to consumers. However, the previous policy of the FDA, spanning from 1985 to 1997, of not allowing ads on television had the effect of denying these benefits and therefore greatly reduced the health of American consumers. In most European countries, such ads are still illegal, and so health of citizens of these countries is harmed. A recent meta-analysis of research on DTC advertising has found that overall DTC advertising is beneficial to consumers.<sup>29</sup>

<sup>29</sup> P. Rubin & A. Atherly, The Cost Effectiveness of Direct to Consumer Advertising for Prescription Drugs (Feb. 2008) (mimeo, Emory University), available at http://ssrn.com/abstract=1092164.

#### 3. Off-Label Uses

Once a pharmaceutical is approved by the FDA, then physicians are free to prescribe the drug for any condition. Uses other than the approved uses are called "off-label" or "unapproved" uses. The FDA does not allow pharmaceutical companies to inform physicians about such off-label uses, unless the physician requests the information. It is even forbidden for companies to hand out reprints of medical journal articles describing research into off-label uses. It is in the interests of patients suffering from conditions that can be alleviated or cured by a drug to have their physician aware of this property, whether it is on- or off-label. The patient's interest is in the treatment, not in the details of the drug approval process. The interests of the patient and the firm are congruent, in that both want physicians to be aware of all characteristics of the drug, whether on- or off-label.

Medical journals routinely publish articles discussing unapproved uses, and medical textbooks and compendia of information also provide such information. This information is widely used. These off-label uses of drugs are commonly an important part of medical therapy.<sup>30</sup> In one study, the General Accounting Office found that one-third of drug administrations in cancer patients were for off-label uses, and that fifty-six percent of all patients received at least one drug for an off-label use. Eighty-one percent of AIDS patients received at least one drug off-label, and 40 percent of all reported drug use was off-label. Eighty to 90 percent of all pediatric patients are prescribed drugs off-label. For patients receiving anti-depressants, 56 percent of use was for unapproved uses.

When drugs are effective in off-label uses, but pharmaceutical companies cannot provide information about these uses, then physicians are less likely to learn of the uses and patients will suffer. Practicing physicians overwhelmingly believe that the restriction of information about off-label uses is harming their practice, and thus harming patients, by restricting the use and dissemination of information. Several polls of physicians have found that between 65 and 80 percent of physicians in various specialties agree that information about off-label uses should not be restricted. Manufacturers can seek approval for new uses from the FDA, but such approval is expensive to obtain, and the FDA gives lower priority to supplemental approvals, so that these take longer. In addition, medical knowledge advances more quickly than can the FDA. Thus, new uses are discovered and research describing these uses is published, but the FDA is much slower in approving new uses. Even if drug firms applied for supplemental labeling for all new uses, the FDA would be unable to process these requests promptly, and there would still be many useful and beneficial but unapproved uses of many drugs.

<sup>30</sup> See H. Beales, FDA Regulation of Pharmaceutical Advertising: Economic Analysis and the Regulation of Pharmaceutical Advertising, 24 Seton Hall L. Rev. 1370 (1994) and A. Tabarrok, Assessing the FDA via the Anomaly of Off-Label Prescribing, V(1) INDEP. Rev. 25-53 (Summer 2000).

The result of these factors is that if physicians cannot learn about off-label uses, there are many valuable uses of drugs that will never be communicated to physicians and so will never benefit patients. There is evidence that use of new

drugs is associated with greatly increased health and longevity.<sup>31</sup> While this evidence does not deal directly with the issues here, it is evidence that utilization of new drugs is highly beneficial, and information provision by the manufacturer is an important way in which the medical community learns about new drugs.

Providing information about medicines to physicians is useful, but provision of such information is expensive, on both the demand and the supply side. That is, it is expensive to communicate the information to physicians, and it is expensive (in terms of lost time) for physicians to absorb the information. The pharmaceutical companies are in the best position to bear the

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# VI. Deception by Omission and Mandated Disclosures

So far, I have dealt with deception in the form of false statements. However, a further class of acts which are sometimes viewed as deceptive are statements which are true but incomplete in some way which is viewed as material. For these cases, regulatory agencies impose various remedies. Sometimes sellers are held to commit "deception by omission." In other cases, there is some mandated disclosure associated with an ad. These mandated disclosures may be required "across-the-board" for all advertising of a product, or may be "triggered" by some claim.

An example of a statement which is alleged to be deceptive by omission is from a recent filing before the FTC, "in re: The Almond Board of California 'Petition To Prohibit False And Misleading Advertising," submitted by the Center for Science in the Public Interest January 29, 2001. The allegation was that "[w]hile the almond ad states that increased almond consumption will lower

<sup>31</sup> See F. Lichtenberg, *Pharmaceutical Knowledge-Capital Accumulation and Longevity, in Measuring Capital in the New Economy (C. Corrado et al. eds., 2003) and F. Lichtenberg & S. Virabhak, Pharmaceutical-embodied Technical Progress, Longevity, and Quality of Life: Drugs as "Equipment for Your Health"*, 28(4-5) Managerial & Decision Econ. 371-92 (2007).

your blood cholesterol levels, and thereby lower your risk of CHD, it fails to disclose that almonds are high in calories."

An example of mandated disclosure is the set of warnings on cigarette packs and in cigarette advertising. These disclosures are across-the-board since any ad for a cigarette requires a health warning. Triggered disclosures are disclosures required only if some other claim is made. For example, under the Truth in Lending Act (1968), a U.S. federal statute requiring disclosure of certain terms and costs of any credit contract, whenever a statement about interest rates is made, there must also be statements about amount of down payment and the number and size of monthly payments.

While such disclosure remedies are common, economic analysis casts doubt on their general utility. (It is often useful for government to devise an appropriate metric, or scoring system, for measuring some attribute. Truth in Lending requires the use of the Annual Percentage Rate as the interest rate; the "R-value" rule requires the use of R values for measuring the effectiveness of insulation.) There is much support in the literature for the proposition that, as long as deception is not allowed, there are incentives for sellers to disclose even the negative attributes of their products. This is because consumers will rationally assume that any advertisement that omits a critical piece of information (say, the durability of a product) will imply that the value of that attribute for that product is at the lowest level. Thus, producers of products with quality levels above the minimum will have incentives to advertise this fact, and in the limit the market will provide complete information. The models which prove this result are quite general, and the result seems robust. This result has been shown in Grossman (1981), Milgrom (1981), and many other sources.<sup>32</sup>

At first, this proposition may seem unrealistic. However, consider price. The price of a product is a negative characteristic; we would all prefer to get products free. Nonetheless, sellers do routinely advertise prices. As the theory would predict, the advertising is driven by those firms with the lowest prices (that is, the least bad value for a negative attribute). Higher priced sellers may not advertise price at all, but when a consumer observes a product being advertised with no price information, the normal assumption is that it is not a discount price, and may be a high price.

Another example is the advertising of tar and nicotine content of cigarettes.<sup>33</sup> In the 1950s (and perhaps earlier), consumers began to fear the health effects of smoking, and began to believe that tar and nicotine were undesirable. As a

<sup>32</sup> See S. Grossman, The Informational Role of Warranties and Private Disclosure About Product Quality, 24 J.L. & Econ. 461-83 (1981) and P. Milgrom, Good News and Bad News: Representation Theorems and Application, 12 Bell J. Econ. 380-91 (1981). For a summary discussion, see D. Spulber, REGULATION & MARKETS 449-55 (1989).

<sup>33</sup> See J. Calfee, The Ghost of Cigarette Advertising Past, REGULATION 35-45 (Nov/Dec 1986).

result, cigarette companies began to advertise the levels of tar and nicotine, with the advertising being stimulated by those brands with the lowest levels. (The process was greatly slowed down in 1959 when the FTC virtually stopped such advertising.) Nonetheless, there was a substantial incentive for advertisers to publicize the negative aspects of their products, as long as some brands had less negative characteristics than others.

From a theoretical perspective, the process of advertising negative characteristics is the obverse of the lemons problem, discussed earlier. In a lemons market, information is not verifiable, and so only low quality products are sold because sellers cannot convince buyers to pay for high quality products. The process discussed in this section requires some form of verification, but the theory indicates that if there is some method of checking on claims, then sellers will offer complete information about both high and low quality products. The analysis shows that if the lemons problem can be solved, sellers of high quality products will have incentives to reveal that their products are indeed of high quality. But this means in the limit that any seller of a product that is of any quality above the minimum will indicate quality. Consumers may then assume that any product that does not disclose quality is of minimum quality, and the informational problem is solved.

In making policy about disclosure, it is important to distinguish between equilibrium and disequilibrium situations. At equilibrium, there will be a substantial amount of disclosure in markets. However, many interesting policy issues occur in periods of disequilibrium. Decision makers in regulatory agencies may observe this disequilibrium and formulate incorrect policies. It is possible for these policies to lead to consumer injury by delaying or preventing movements toward equilibrium. The disequilibrium may be about advertising, but it may be about actual product characteristics as well. Advertising affects sales at current prices of existing products. It also influences characteristics and prices of products that firms will offer in the future. Advertising changes future product characteristics because a firm will only produce products or establish prices that it expects to be able to advertise. Thus, interferences with the ability of firms to advertise product characteristics may also have adverse effects on the actual menu of products offered in the market.

A disequilibrium is likely in a market which has changed in some way. Possible changes are in product characteristics, in information about products, or in consumers' tastes. Because there has been some change, existing products will not perfectly satisfy consumers' desires. Nonetheless, producers of those products closest to satisfying new wants will have an incentive to advertise this fact. In such circumstances, some advertisers may initially offer partial information to consumers. At some point, other advertisers will compete by offering more complete information, and others may compete by further changing the product to reflect changed tastes. The final equilibrium will occur with relatively full infor-

mation and with the optimal set of products being offered. However, if the process is stopped because regulatory authorities think that the partial information is deceptive, then the full information equilibrium will never be reached, and the best set of products may not be sold.

A good example is the history of advertising of the fiber content of breakfast cereals, discussed earlier. Another example of a change in product characteristics caused by advertising is cigarette advertising, also mentioned earlier. When advertising began, tar content of filter cigarettes was virtually no lower than for regular cigarettes. Nonetheless, over a short period (from 1957 to 1959), levels (weighted by sales) fell by 40 percent because of heavy advertising of tar and nicotine content. The first cigarettes to advertise had perhaps only marginally lower tar levels than other brands, and when regulators looked at this advertising they ultimately stopped it as being deceptive. The long-run effect of the advertising before it was stopped was to actually change product characteristics. As sellers competed by advertising tar and nicotine levels, some producers found it worthwhile to reduce levels to be able to advertise lower amounts. Other firms responded, and the ultimate result was reduced levels of tar and nicotine. The benefits to consumers of this dynamic effect of the advertising greatly outweighed any potential harmful effects from any alleged initial deception.

An additional claim that is sometimes held deceptive is a "false uniqueness" claim. A product may advertise some characteristic common to all versions of that product. For example, a margarine manufacturer may claim that his produce has "no cholesterol". While this claim may be true, it is also true for all manufacturers of margarine, and so regulators may require a manufacturer to either indicate that it is true for all, or to stop making the claim. In either case, the firm will stop, since there is no point in advertising the benefits of competitors' products. In such instances when the claim is true, the policy of policing false uniqueness claims can deny consumers valuable information.

### VII. Remedies

Some remedies for deception which have been used or proposed are, in increasing order of severity, cease and desist orders, corrective advertising, consumer redress, and fines. To evaluate these remedies, it is useful to set forth a theory as to the goal of the remedy. The ultimate goal is maximization of consumer welfare and this can be achieved if it does not pay for firms to engage in acts likely to lower welfare. Policies should therefore be aimed at making sure that harmful acts do not pay.

What is relevant is that a remedy provides the correct amount of deterrence. For the types of activities discussed in this paper, it is possible to have either under-deterrence or over-deterrence. Under-deterrence is the situation in which whatever penalties exist are too low, so that too much deception occurs. Over-

deterrence occurs when penalties are too high. While it may appear that it is impossible to have "too little" deception, it is nonetheless possible to over-deter with what is called deceptive advertising. This is because, as indicated at many points in this chapter, the line between deception and useful information is not

always clear and one result of over-deterring deception through excessive penalties would be the suppression of provision of information that many consumers will find useful.<sup>34</sup>

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The traditional FTC remedy for deception was a cease and desist order requiring the firm to stop the offending ad. In general, such orders include language forbidding the practice in question in the future, and are enforced by fines in the event of a violation. This remedy is relatively mild and therefore unlikely to over-deter, although there is evidence dealing with the stock market effects of these orders which indicates that they may be much more costly than is apparent. The Magnuson-Moss FTC Improvements Act of 1975 gave the Commission broader powers, including the power to enforce rules with monetary penalties and the power to seek redress for fraud under some circumstances. The Commission relies heavily on the theory of optimal deterrence in computing fines, and the economists are deeply involved in these computations.

For most deception cases, the Commission still relies on cease and desist orders. Usually this is the appropriate remedy. As indicated above, a determination that an ad is deceptive is difficult, and many ads may be innocently written and later interpreted as being deceptive. Even when using their best efforts, firms will sometimes err and produce an ad that is later held to be deceptive. Since this is so, any penalties more severe than an order to stop could easily cause firms to reduce the amount of potentially actionable material in their ads. This could be done by simply reducing the information content of the ads, and relying instead of puff or image advertising.

The Commission has also reduced its reliance on corrective advertising. This is appropriate since most evidence indicates that the effects of advertising are short-lived and so the effects would likely have dissipated before the corrective ad would appear. The only purpose of a corrective ad would therefore be extra deterrence, but if desired this can be achieved more efficiently through direct methods.

<sup>34</sup> On the general issue of optimal deterrence, see G. Becker, *Crime and Punishment: An Economic Approach*, 76 J. Pol. Econ. 169-217 (1968); R. Posner, Economic Analysis of Law, ch. 7 (7th ed. 2007); and A.M. Polinsky & S. Shavell, *The economic theory of public enforcement of law*, 38(1) J. Econ. Lit. 45-76 (2000). For a discussion of over-deterrence of "white collar crime," including advertising, see P. Rubin & R. Zwirb, *The Economics of Civil RICO*, 20 U.C. Davis L. Rev. 883-912 (Spring 1987).

<sup>35</sup> See Peltzman (1981), supra note 13 and Mathios & Plummer (1989), supra note 14.

The FTC has powers to name advertising agencies as well as advertisers in complaints for deception. If agencies have skills in assuring that ads are not illegally deceptive, then finding them liable would seem to increase the ability of the Commission to deter deception. However, advertisers have contractual agreements with agencies. Therefore, if advertisers want agencies to help them comply with the law, then they can contract for these services. It would even be possible for an advertiser to contract with an agency for indemnification in the event of liability. More generally, it would not be efficient for agencies to determine the truth or degree of substantiation for each ad they produce. Imposing liability would increase the costs of advertising since agencies would be forced to make an independent investigation of each ad.

Holding agencies liable would perhaps increase deterrence, but as we have seen there is no evidence that deception is being under-deterred, and some fear of over-deterrence. Moreover, if it is desired to increase deterrence, then this can be done directly—for example, by giving increased publicity to Commission findings of deception. Since orders for agencies would cover ads in many areas and for many types of products, over-deterrence is particularly likely. Therefore, there is no general argument for finding agencies liable for classic deception.

For those acts that are to be punished by a fine, it is important to use the correct fine. First, it is appropriate to restrict the use of fines to true fraud (deception where the firm is consciously attempting to deceive) since this reduces the chances of over-deterring provision of true information. Second, it is important to realize that there are market (including labor and stock market) penalties for being punished at all by the FTC, and so fines should take into account these market punishments. Third, the correct fine is one which total penalties (including market penalties) are just equal to the (expected) harm caused by the deception. Such a fine will provide firms with the correct incentives. Since some who engage in deception will not be caught, the actual punishment must be greater than the observed harm for those who are detected. If, for example, one offender of three is detected, then the penalty must be equal to three times the harm caused by those who are punished. In this case, the probabilistic value of the fine to someone considering violation will just be equal to the harm his act will cause, and the result will be that firms will not undertake acts that impose net harms on consumers. As indicated above, this is the exact goal of deterrence.

More recently, the FTC has begun bringing more cases involving actual fraud and fewer classic "deception" cases, and so is relying more heavily on fines. For hard-core fraud, it may be difficult to obtain optimal penalties since the money may be spent or hidden. Thus, there may be a serious problem of under-deterrence in these cases. This may also provide some justification for holding advertising agencies liable, since this will increase the amount of deterrence possible.

### **VIII. Summary**

While it is difficult to summarize the policy implications of an analysis which is itself a summary, there is one recommendation which others have made and which is worth reinforcing: The most harmful regulatory policy towards advertis-

ing is the suppression of true information. Consumers have greatly benefited by increased price advertising because of various policy initiatives. The FTC, both in its enforcement policies and in its submissions to other regulatory bodies, is increasingly encouraging disclosure. Other regulatory bodies (the states with respect to true price claims, the FDA with respect to true health claims) have not fully absorbed this les-

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son. While it has long been known that true information about price is useful, this point is more general, and all true information should be encouraged. One way to move towards this goal is to rely on agencies with an expertise in advertising and economics to enforce advertising restrictions.

There is an additional major recommendation: Rules mandating disclosure are generally unnecessary, and often harmful. There are powerful incentives for disclosure of even adverse information. Firms will disclose approximately optimal amounts of information, and markets will use this information and provide the correct set of products. Inefficient policies may limit the amount of information that consumers will receive. Additionally, and more importantly, inappropriate rules regarding disclosure can thwart the tendency of markets to provide the correct set of products for consumers. No regulatory agency has yet absorbed this lesson.