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Advertising, search costs, and social welfare

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Abstract

Analysis of the welfare effect of advertising depends critically upon the effect of advertising on market prices. In many circumstances, advertising that leads to higher (lower) market prices is overproduced (underproduced) from society's perspective. This paper demonstrates that these predictions may not hold when consumer search costs are important. A model is developed to show how advertising affects equilibrium prices, search costs, and social welfare in monopoly and imperfectly competitive markets. When informative advertising leads to a sufficient reduction in consumer search costs, both consumer and producer welfare may increase even though market prices rise. This conclusion has important implications for policy analysts, because it demonstrates that one cannot test the welfare effect of advertising by determining the impact of advertising on market prices alone. One must investigate the impact of advertising on both market prices and search costs to fully understand the welfare effect of advertising.

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0. Introduction

Debate about the social desirability of advertising has a long history and is characterized by very polarized positions. In the economics literature, Chamberlin (1933, pp. 119–120) argues that advertising may increase demand "by altering wants themselves". This is a manipulative form of advertising as it exploits "the laws of psychology" with which the consumer "is unfamiliar and, therefore, against which he cannot defend himself..." McFadden and Train (1996) define this as a form of persuasive advertising that changes consumer tastes or beliefs about the product without changing the actual product characteristics themselves. In their classic work, Dixit and Norman (1978) argue effectively that when advertising changes tastes, any resulting increase in consumer surplus is illusionary and, therefore, should not be included in welfare calculations. [1]

Of course, not all forms of advertising are detrimental to society. Stigler (1961) and Telser (1964) contend that advertising can provide useful information, which leads consumers to lower priced products with more preferred characteristics. In addition, Nelson (1974) and Milgrom and Roberts (1986) show that advertising can signal quality in markets for search goods.

More recent research has investigated how specific types of advertising affect market equilibria. For example, Stahl (1994) and Bester and Petrakis (1995) identify conditions under which firms in an oligopoly setting choose pure and mixed strategies in price and advertising. Regarding informative advertising, Stegman (1991), Hernandez-Garcia (1997), and LeBlanc (1998) investigate the impact of informative advertising when firms advertise in several media, use targeted advertising, and use advertising that reaches all consumers at a fixed cost. For purely persuasive advertising, Von der Fehr and Stevik (1998), Bloch and Manceau (1999), Tremblay and Martins-Filho (2001), and Tremblay and Polasky (2002) determine the effect on market prices of advertising that changes consumer perceptions about horizontal and vertical product differentiation.

Previous research shows that the welfare effect of advertising hinges on the impact of advertising on market price and the extent to which advertising changes consumer tastes. [2] In their pioneering work, Dixit and Norman (1978) demonstrate that the market will oversupply advertising when it leads to a higher market price and does not directly increase consumer utility. When it provides direct benefits to consumers

[1] This statement is strictly true only in a covered market. For recent treatments of persuasive advertising in imperfectly competitive markets that are covered and uncovered, see Hallagan and Joerding (1983), Von der Fehr and Stevik (1998), Bloch and Manceau (1999), Tremblay and Martins-Filho (2001) and Tremblay and Polasky (2002).

[2] The impact of advertising on market prices has been extensively investigated in the empirical literature. Early studies find that advertising restrictions lead to higher market prices (Carlton and Perloff, 2000). More recent studies indicate that a marginal increase in advertising leads to higher market prices (Wills and Mueller, 1989; Rizzo and Zeckhauser, 1992; Tremblay and Tremblay, 1995; Farr et al., 2001). This suggests that advertising may have both persuasive and informative components, with the persuasive effect dominating for a marginal change and the informative affect dominating for a complete ban on advertising.