Media Advertising and Ballot Initiatives: An Experimental Analysis

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Timothy Richards , Arizona State University, Mesa, AZ
William Allender , Arizona State University, Mesa, AZ
Di Fang , Arizona State University, Mesa, AZ
Abstract:Spending on political advertising increases with every election cycle, not only for congressional or presidential candidates, but also for state-level ballot initiatives. There is little research in marketing, however, on the effectiveness of political advertising at this level. In this study, we conduct an experimental analysis of advertisements used during the 2008 campaign to mandate new animal welfare standards in California (Proposition 2). Using subjects' willingness to pay for cage-free eggs as a proxy for their likely voting behavior, we investigate whether advertising provides real information to likely voters, and thus sharpens their existing attitudes toward the issue, or whether advertising can indeed change preferences. We find that advertising in support of Proposition 2 was more effective in raising subjects' willingness to pay for cage-free eggs than ads in opposition were in reducing it, but we also find that ads in support of the measure reduce the dispersion of preferences and thus polarize attitudes toward the initiative. More generally, political ads are found to contain considerably more "hype" than "real information" in the sense of Johnson and Myatt (2006).

Topic Relevance and Research Methodology

In 2008, the citizens of California voted in favor of Proposition 2, which bans the use of cages for housing egg-laying chickens. Similar propositions in Arizona (Proposition 204 in November, 2006) and other states mandate stall-free and crate-free housing for sows and calves for veal, respectively. Media advertising is used heavily in state-level propositions because of the narrow focus of the issue, the geographic concentration of likely voters and the (typically) highly polarized nature of the campaigns. There is evident support for this issue among some consumers as cage-free eggs sell for a significant premium in retail stores (sometimes $1.75 per dozen or more). What is less clear, however, is whether voting in initiatives similar to Proposition 2 is driven by advertising-inspired mass-support of the issue at hand, or whether it is highly motivated support by a small segment of the population that cannot be influenced by advertising. In this study, we examine the role of media advertising in the initiative process using an experimental analysis of ads used by both supporting and opposing sides for Proposition 2 in California in November 2008.

Animal welfare has become increasingly prominent as consumers become more conscious about what they eat, and where it came from. Several studies suggest that consumers perceive products with animal-friendly attributes to have a higher quality due to ethical beliefs, taste, food safety or health benefits (Harper and Makatouni, 2002; Ophuis, 1994; and Lusk et al., 2007). Note_1 Regulating animal welfare, however, presumes a market failure, but how does the market fail to adequately provide for the well-being of animals used to produce our food? To the extent that the method of production is a credence attribute, then the usual asymmetric-information arguments

arise (Larue, West, Gendron, and Lambert, 2002; Lusk, Fox, and Roosen, 2003; and Hartl and Herrmann, 2009). Alternatively, if we consider animals in general to be an appropriable resource similar to water, minerals or lumber, then many believe that producing food according to commercial methods imposes a negative production externality on society. Producing cage-free eggs or stall-free pork are thus means of internalizing the negative externality. Advertising in animal welfare ballot initiatives can therefore be interpreted as a means of convincing voters to voluntarily self-impose a tax meant to address the externality problem, much like a tax on fossil fuel is a means of reducing the costs imposed by greenhouse gas accumulation.

The welfare impacts of taxing egg-producers or imposing inefficient production techniques are critically dependent on whether advertising shifts the demand curve by changing preferences through "hype" (Dixit and Norman, 1978) or rotates the demand curve through the provision of "real" information about the product and its alternatives (Nelson, 1970, 1974). While the current orthodoxy in empirical advertising studies is to either assume advertising only shifts the demand curve, or to interact advertising and prices to obtain some type of ad-hoc measure of the rotational effect, we apply a new empirical approach to distinguish between the two. If consumers are indeed heterogeneous in their preferences, then a demand curve essentially represents a probability distribution of willingness to pay across consumers that are highly knowledgeable and involved with the product, and those with only casual knowledge of, and preference for, the product. This is the observation that lead Johnson and Myatt (2006) to develop a formal model of how advertising, and other media activities, really affects demand. The intuition is straightforward: If a product appeals to a "niche" market, or if the issue is of intense interest to a concentrated group of voters, then advertisements that appeal to the core of this market will increase the dispersion of consumers' willingness to pay and rotate the demand curve clockwise, increasing the willingness-to-pay of the marginal consumer whose willingness-to-pay is above the mean and reducing it if the marginal consumer is below the mean. Reducing the dispersion of demand means that the advertisement contains real information as it allows consumers to sharpen their opinion of the product or, in this case, the issue. If a consumer strongly prefers a product or side of an issue, then real information regarding that issue will merely reinforce his or her position and move them away from the mean of all voters. If, on the other hand, the issue is of interest to the mass market or all voters who have at least a passing interest in the topic, then a successful ad will reduce the dispersion of demand and rotate the demand curve counter-clockwise (make it more elastic). In this case, the ad will increase the willingness-to-pay of the marginal consumer who begins with a valuation below the mean.

Discussion Generation During the Meeting

This article makes a number of contributions to the policy and marketing literature which are sure to generate discussion during the meeting. First, we develop a new method of estimating the effect of marketing activities in an important, yet little studied category of advertising expenditure: voter behavior in public referenda. Second, our econometric model provides a way of separating the hype content of advertising from its informative content. In doing so, we also offer a new explanation for the observed asymmetric effects of positive and negative information

on consumers' preferences. Third, we propose and apply a metric against which policies may be judged as being either for or against the public interest. The role of marketing in the formation of public policy is too often overlooked, despite its obvious importance in the exercise of direct democracy.

Our research has three objectives. The first and primary objective of this study is to determine the willingness-to-pay for food products raised in a "humane" way, or one that is fundamentally different from current practice. The second objective is to determine the relative effect on WTP of media advertising presented either in support of an animal welfare initiative, or counter to it. The third objective is to determine whether media advertising shifts or rotates the demand curve, and the welfare implications of whether the dominant effect is a shift or a rotation. Ultimately, we seek a better understanding of the role of campaign spending on matters that materially impact the ways in which firms can conduct themselves.

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