Economic Evaluation of Commodity Promotion Programs in the Current Legal and Political Environment

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Advertising and Consumer Welfare: Discussion

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The paper written by Julian Alston, James Chalfant, and Nicholas Piggott centers around the impact of demand shifts due to advertising on consumer welfare. The starting point is the well-established paper by Dixit and Norman (1978) (DN). The DN assessment was that since advertising operates as a factor in utility functions, it directly changes utility functions. Therefore, welfare cannot be measured from two different demand equations because the demand equations are derived from different utility functions. DN measured consumer welfare change (loss) as the change (increase) in price times original (pre-advertising) quantity or change (decrease) in price x post advertising quantity.

Alston, Chalfant, Piggott (ACP) establish welfare by using a measure of compensating and equivalent variation with utility held at pre (CV) or post (EV) advertising levels, and isolating price and quantity changes. To achieve this, they use the AIDS model which is explicitly derived from an expenditure function, allowing parameters of the expenditure function to be directly derivable from estimated expenditure shares equations. The main difference between DN and ACP is that ACP allow for measurement of price and advertising's direct effect on CV (EV) while DN isolated the effects of advertising to the price effects.

It is worth noting that DN's results were expressly predicated on the fact that advertising does not directly generate utility, although by inclusion in a utility function (as a shifter in their terminology), mathematically there is a relationship between advertising and utility. ACP have chosen to include that direct impact of advertising on welfare in their welfare measurement.

However, both studies measure welfare with utility held constant--a critical element for consumer welfare measures. The empirical results of ACP suggest that in the context of Australian meat advertising, a DN estimate of consumer losses is less than 10 percent of ACP's estimate. In a social welfare sense, this impact is large enough to change the net social welfare impact from a benefit to a loss.

Essentially, the authors have chosen to make different assumptions around the same concept of measuring consumer welfare associated with Marshallian demand relationships. Kotowitz and Mathewson (1979), on the other hand, have held an equally rigorous position that advertising should not be incorporated into a quantity-driven utility process. Instead, they make a persuasive argument for incorporating advertising into a quality-driven utility function by Lancaster demand models, for example. Further work, particularly empirical work, on using Lancaster demand models to establish advertising effectiveness and welfare implications is clearly an underresearched area in this field of advertising research.

The second point made persuasively by ACP is the fact that once you measure consumer or social welfare issues associated with advertising, the concept becomes meaningless in a single commodity sense. At some level, advertising must be a zero sum game. Therefore, it is essential for consumer welfare measurement considerations that we establish the level at which advertising becomes a zero sum game. For example, with fixed incomes consumers can only consume more of one good at the expense of consuming another. This is transparent in a demand system but not so obvious in a single commodity demand model. Measures of consumer/social welfare are thus biased when only the impact on a single good is established. The importance of this in establishing the social or public stake in advertising is critical, particularly if the debate is widened to consider funding supply-shifting research activities vs. demand-shifting advertising activities. Biased estimates of social consumer effects may very well distort the public prescription of where funds should be spent.

In establishing the overall social implications of advertising, further research must include some estimate of the impact on agents operating between producers and consumers, taking into consideration relevant market structure parameters.

I am delighted with the fact that ACP have made a contribution to the area of advertising and consumer welfare. This area needs more research since the link between advertising and consumer welfare is not a particularly well-established one theoretically. By quantifying the magnitude of different assumptions, ACP have made a useful contribution. With the current legal and public scrutiny facing most commodity programs in the U.S., it is possible that empirical measurement of consumer and social impacts will take a higher profile in future debates.

References:

Alston, J., J. Chalfant, and N. Piggott. 1996. "Advertising and Consumer Welfare." Paper presented at the NEC-63 Conference 'Economic Evaluation of Commodity Promotion Programs in the Current Legal and Political Environment,' Monterey, California, October 7-8.

Dixit, A. and V. Norman. 1978. "Advertising and Welfare." *Bell Journal of Economics* 9:1-17.

Kotowitz, Y. and F. Mathewson. 1979. "Informative Advertising and Welfare." *American Economic Review* 69, no. 3:284-94.

Kotowitz, Y. and F. Mathewson. 1979. "Informative Advertising and Welfare.". *Bell Journal of Economics*, Autumn, Vol. 10, No. 2, pg. 566-588.