Is Search Advertising a Market for Lemons?

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Anand Rajaraman recently wrote a very thought-provoking entry on his Datawocky blog (http://anand.typepad.com/datawocky/2008/04/is-search-adver.html). He asks "Is Search Advertising a Giffen Good?" As he explains a Giffen Good is a sort of economic doomsday machine that some segment of consumers are forced to buy more of an inferior good as the price of the inferior good goes up. His article is well written are really invites one to think about the issue. Anand's question made me thing about a number of issues (which I will outline here) and I will leave off with a question of my own.

The classic example of a Giffen situation is when rice or noodles are sold to the poor. If the price of rice goes up this segment of consumers has no choice but to curtail their spending on more expensive legumes, vegetables and meat to put what remains of their spending power into the cheapest source of calories (which could remain rice, even though the price of rice increased). This isn't really free choice, or stockpiling in anticipation of further price increases but a simple grim economic trap. Giffen behaviors have long been suspected but not really documented with much quality until recently (see "Giffen Behavior: Theory And Evidence" Robert T Jensen, John F Kennedy, NBER Working Paper (2007) vol. 13243).

It is hard to determine if advertisers are Giffen consumers. For one marketing and advertising are "Positional Goods," that is goods that derive some of their value from ranking (like market share). Marketing and advertising also have large negative externalities. That is every advertising dollar spent by Company A not only takes business away from Company B (the more famous zero-sum part of advertising) but also drives up unit costs of advertising for all advertisers (part of the negative externality). These sort of goods can drive a lot of very strange (and counter-intuitive) market behaviors.

The first strange market behavior is an unlimited ratchet effect. It is hard to pinpoint what portion of advertising really grows the market and what portion merely moves consumers from brand to brand (television advertising of cigarettes in the United Stats cigarette is an interesting example "The Effect of the 1971 Advertising Ban on Behavior in the Cigarette Industry" Craig A. Gallet, Managerial and Decision Economics, Vol. 20, No. 6 (Sep., 1999), pp. 299-303). To the extent that advertising is not growing the market you just have dollars chasing each other. Society can experience a ratcheting effect where you move from a reasonable amount of advertising spend to a place, as described in Cory Doctorow's "The Rebranding of Billy Bailey," where so much is spent on advertising that people have to lease out advertising space on their own skin. That is people can not afford to buy goods at inflated prices unless they earn additional income by subjugating their selves to marketing campaigns and prices are in turn high because so much is spent on marketing campaigns.

This ratcheting effect is so strong that we see hints of game-theoretic situations every bit as strange as those described in Herman Kahn's "On Thermonuclear War."

Returning to the United States cigarette example we can speculate if the 1970's band on TV advertising was really an "arms control treaty" among cigarette manufactures to decrease television spend (remember under United States law it would be illegal collusion for competing companies to negotiate a spending cap among themselves). We also saw use of "credible threats" in the form of advertising deliberately spent in very inefficient channels (such as expensive golf sponsorships). Such spending is dollars deliberately wasted to demonstrate that one company could instantly move dollars into more effective channels (magazine ads, billboards, NASCAR) if any completing company "defected" and moved more of its dollars into effective channels. The companies themselves do not need to be incredibly clever or Machiavellian to come up with these strategies- the competition in the market can lead them into these behaviors.

In online advertising "targeted ads" (that is ads shown to people who have just typed in a search related to a product) are by far the most valuable. This is, of course, because these are often the people that are closest to making a purchase. But these are also the "zero sum" people- you are not growing the overall market when you advertise to them. So if you could get your competitors to agree not to advertise to them you would also be happy not to advertise to them (somebody would still make the sale and you would all

save a lot of money).

Now I will get to my question: is search advertising a market for lemons? A “market for lemons” is a market where goods are hard to examine so it is marginally profitable to try to get away with selling defective goods in the market. Usually such markets collapse as buyers can not afford to pay fair value (as they know they will often get defective goods) and sellers stop placing any non-defective goods (as buyers are no longer able to offer fair prices). The name comes from the American slang for a defective car and the ideas (including an analysis of used car markets leading to the invention of “dealer certified” guarantees) eventually led to a Nobel Prize in Economics. We must realize that high spend in advertising is not always proof that there is high value in advertising. The dynamics of the market can cause high spend independent of true value. Right now we are seeing very high and increasing spend in search advertising. I argue that spending alone is not enough to determine the value of search advertising. We have seen an online advertising boom/bust cycle once before; back when everybody was trading traffic through affiliate networks (the “eyeballs and money” era of the Internet). Affiliate networks were definitely a market for lemons: full of aggregators that mixed premium traffic with low quality traffic and sold the aggregate for more than sum of the parts. To avoid this we now market advertising impressions (often banners, priced as CPM) and advertising clicks (often driven by target text ads, priced as CPC). However both of impressions and clicks are just traffic seen from the other side. Once you get clever with targeting, modeling and manipulating “click through rates” you see that each advertising click is in fact equivalent to some large (but predictable) amount of traffic. Given so many clever players the question becomes: does search advertising really remain a fundamentally different market than affiliate traffic?