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# INFORMATIVE ADVERTISING: A MARKET INFORMATION PROVIDER OR A SEED OF MARKET POWER?

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## Abstract

This paper investigates the role of informative advertising in creation and augment of market power as well as the ability of an advertiser to maximize the value of its economic rent. Informative advertising is considered to be a merit good unlike a persuasive one that is mostly associated with a bad. But analysis of the advertisement breakdown in Ukraine shows that the share of price advertisements, which are the most beneficial for the public, is negligible today. Further still those advertisements are mostly situated in the sectors, where price competition is the least strong. Another kind of informative advertising – differentiating advertising – turns from an instrument of informing consumers into the vehicle of manipulation of consumer choice. Using the blind tests the author has compared the quality and the prices of the range of advertised goods and has found out a low level of correlation between the variables. That means that informative advertising serves a function of informing consumers inefficiently. At the same time phantom differentiation and misleading advertising proliferation as well as informative advertising concentration on experience and credible goods instead search ones testify to effective serving a function of maximizing advertiser welfare.

Key words: advertisement, informative advertising, differentiating advertising, market power, price advertising.

JEL Classification: D82, L15, M37.

## **I.INTRODUCTION**

There are two approaches to investigation of the role of advertising in the economy. They are direct opposite. The first one, which were investigated by Kaldor (Kaldor, 1950), Bain (Bain, 1956), Mitra and Lynch (Mitra and Lynch, 1995) and others, grounds the ability of advertising to augment the market power of certain firms. Another approach determines advertising as an invaluable mechanism of informing consumers about goods and services, their prices and other sales conditions. Among its followers are Telser (Telser, 1964), Butters (Butters, 1977), Grossman and Shapiro (Grossman and Shapiro, 1984), etc. The degree of these approaches correspondence to reality is considered to be classified by the type of advertising. It is believed that persuasive advertising, which is oriented to the deformation of consumer's utility function, conduces to creation and augment of market power, while informative advertising decreases information asymmetry in the market that leads to the market power weakening.

Going with this line of reasoning the author warns about the restrictions of informative advertising beneficial effect on the public welfare. This paper theoretically and empirically (on the case of Ukrainian economy) investigates the prerequisites of informative advertising economic dysfunction. The author shows the ability of informative advertising to create and augment market power of advertiser. The second section is devoted to the analysis of price advertising as the most beneficial but the least popular type of advertising. Using the example of price advertising in retail the author shows how it can be used for market power augment. The third section investigates contradictory impact of differentiating advertising on the market power of advertiser and the public welfare as well. Section IV concludes.

# **II.PRICE ADVERTISING**

Almost all scientific works which ground the positive impact of advertising on the public welfare concentrate on the ability of advertising to spread the information about prices of goods and services, decreasing the natural price dispersion thereby. Let us take, for example, the Butters model (Butters, 1977). Starting from the market of homogeneous goods Butters argued that the main task of advertising was to inform consumers about the prices of the good in different stores. Dealing with the single reserve price *m*, different sellers send out ads at random to buyers. The ads give price and location. Consumers buy the product at the lowest price for which they receive an ad, as long as that price does not exceed *m*. If they receive no ads, or if they receive only

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ads with prices above *m*, they buy nothing. Advertising thus creates social gain by allowing mutually beneficial trades to occur on the one hand and by decreasing the natural price dispersion on the other hand (Schmalensee, 1986/2003, p.191). Later Grossman and Shapiro broke the restriction of homogeneity, adding into an ad the information about store location or product features, which plays the role of differentiation arm in the Salop model. (Grossman and Shapiro, 1984).

The most popular evidence of these models relevance is a variety of studies on prices for glasses, contact lenses and ophthalmic services in the USA in the 1950s. According to them the prices were higher by 45 % in the states with a ban on these goods advertising versus the states where their advertising was permitted (Scherer and Ross, 1990/1997, p.568).

Hence there are two questions: the first one is about the relevancy of the revealed effect expanding from the ophthalmic market into the whole economy, and another is about the relevancy of its expanding into modern age. To answer them the author has studied the advertisement breakdown in Ukraine in the beginning of 2013 (Table 1). The study has shown that price ads that are the base of the above mentioned models amounts less than 8 %. That means that only 8 % of Ukrainian ads are beneficial for competition development and market power restriction.

	Number (Share, %) of investigated ads					
Sourc e of ads		inter alia				
	Total	Persuasive	Informative			
			Total	inter alia		
				Price	Differentiating	
TV	200(100)	118 (59)	82 (41)	11 (6)	71 (35)	
Radio	200(100)	84 (42)	116(58)	8 (4)	108 (54)	
Printed	200(100)	122 (61)	78 (39)	13 (7)	65 (34)	
press						
Internet	200(100)	139 (69)	61 (31)	27 (14)	34 (17)	
Billboard	200(100)	141 (70)	59 (30)	20 (10)	39 (20)	
Total	1000	604	396	79	317	
	(100)	(60.4)	(39.6)	(7.9)	(31.7)	

Table 1. The advertisement breakdown in Ukraine (January-February, 2013)\*

Created on the results of the own empirical study

Industrial breakdown of price advertisements has shown that retail is a leader of Ukrainian price advertising. More than 40 % of investigated price ads advertises for retail services, while retailers are able to manipulate of the consumers' demand not only by persuasive advertising, but also by price one.

Every good in the supermarket has its own trade margin. The ordinary buyer hardly ever buys only the one good there. Being attracted to the supermarket by low price for advertised good he buys also the range of other goods which trade margins are certainly higher than the same for advertised good. Hence price advertising does not work in the way that was determined by Butters, Grossman and Shapiro. In contrast it increases price dispersion in the market and the value of retailers' economic rent.

Another argument to exclude retailers' price ads from the ones that are beneficial for public is the result of the author's previous empirical study on switching the demand between different retailers (Mazaraki, Gerasymenko et al, 2011, p.229). It showed that only 37.5 % of customers were willing to switch the demand to the store with cheaper goods in response to small but significant and non-transitory increase in price. Only those buyers monitored the price ads. Other customers perceive price ads of retailers as persuasive ones, while the persuasive advertising is considered to be the most harmful of all.

It also should be understood, that strong price competition between retailers that theoretically must bring low prices and the absence of any market power does not make such an effect in the retail market because it is not a field of economic rent extraction. Such a rent is usually extracted by retailers on the upstream market of goods delivery for sale. The reason for this shift is information asymmetry.

Modern retailer distinguishes radically from its predecessor of the middle of last century. Fifty years ago famous producers controlled the degree and the quality of consumer awareness through advertising that let them dominate the retailers. Toffler wrote that the producers were the middle link in the informational flow between consumers and retailers. They knew where, how and whom to sell its own goods that gave them the power to impose the full range of sales conditions on retailers. They extracted the economic rent from retailers. Contemporary situation is quite opposite. Coding of the goods and introduction of electronic scanning systems by retailers has concentrated under their control the fullest information about the consumers' preferences, purchasing power, the best places to allocate and the best ways to promote the good. Now not a producer but a retailer has an informational advantage. A retailer extracts an economic rent from a producer today (Toffler, 1990 /2006).

So, correction the sample of price ads by excluding the price ads of retailers decreases the share of socially beneficial ads to 4.6 %. This figure is too small to excuse the advertising and to ground its positive impact on the public welfare.

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#### **III.DIFFERENTIATING ADVERTISING**

Differentiating advertising is another kind of informative advertising that informs a consumer about the features of the product and the sales conditions. Its mission is to explain the differences between similar goods to a consumer, to direct him to the best satisfaction of his needs. Some researches argue that differentiating advertising decreases natural level of information asymmetry in the market through spreading the information about existence of different goods and their ability to substitute each other between consumers. Hence the price elasticity of demand for advertised goods increases (Table 3), and the advertiser's market power weakens.

Methodo- logy	Product	The direction of price elasticity of demand change
empirical	eyeglasses	increasing
empirical 38 consumer goods		decreasing
empirical	drugs	increasing
experiment	canned food	decreasing
empirical	consumable goods	decreasing
experiment	convenience goods	increasing
empirical	warehouse withdrawals	increasing
empirical	PIMS data base	decreasing
empirical	consumable goods	increasing
empirical	low price food	decreasing
empirical	airline industry	increasing
empirical	low price consumable	increasing
experiment	consumable goods	decreasing
empirical	consumable goods	decreasing
	logy empirical empirical experiment empirical experiment empirical empirical empirical empirical empirical empirical empirical empirical	logy      Product        empirical      eyeglasses        empirical      38 consumer goods        empirical      drugs        experiment      canned food        empirical      drugs        experiment      canned food        empirical      consumable goods        experiment      consumable goods        empirical      Warehouse withdrawals        empirical      PIMS data base        empirical      low price food        empirical      low price food        empirical      low price food        empirical      low price goods        empirical      consumable        goods      empirical

Source: Popkowski Leszczyc and Rao, 1989

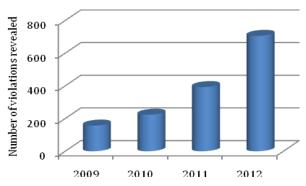
Other researches insist on the opposite effect of differentiating advertising (Table 3). They ground that such advertising enhances artificial differentiation of goods, creates the perception of substitutes' nonidentity, and moves them off each other in the coordinates of consumer properties of the good, making the market power zones. Explaining this phenomenon Gelman and Salop wrote: "The coca-cola and the Pepsi are likely to be the perfect substitutes for uninformed consumers, while the majority of regular consumers of these goods always prefer one beverage to another." (Schmalensee, 1986/2003, p.200)

Notwithstanding the oppositely directed impact of differentiating advertising on price elasticity of demand and the risk of market power augment it becomes injurious to the public only in the case when the real differentiating is replaced by artificial one, which is created by the efforts of advertising agents. Matsievskyi calls it phantom differentiation. (Matsievskyi, 2011).

The first allusion about the cases of phantom differentiation goes to works of Walras (Walras, 1874/ 2000, p.377), but the high speed of modern society informatization accelerates the problem. To argue this let us look the dynamics of competitive law violations as dissemination of misleading information in Ukraine. For the last four years (a dissemination of misleading information was defined as a violation of Ukrainian Act on Protection from Unfair Competition by adoption of amendment of 2008) its number has been running up monotonous (Fig. 1), taking more than 90 % of the unfair competition cases.

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**Figure 1 – Dynamics of the dissemination of misleading information in Ukraine (2009-2012)**\* \* Sources: Antimonopoly Committee's of Ukraine Annual Reports, 2009-2012

Phantom differentiation, as an instance of a dissemination of misleading information, limits allocative efficiency of the economy. It makes economic agents to exchange scare economic resources not for the real utility, but for the illusion of better satisfaction of the need. Investments mostly goes to defray the costs of rent seeking (inter alia the advertising costs) and to create the economic rent for market power holders instead the stimulation of economic growth.

Phantom differentiation revealing is a complex task. Sometimes it is impossible to set up the correspondence between real features of the good and advertised ones even after its durable consumption. The average share of search goods in the product breakdown of Ukrainian advertisements is 36 %. In the group of TV advertisements, which are oriented to the biggest audience, it is much lower, being equal to 11.3 % (Table 4).

Table 4. Product breakdown of advertisements in Ukraine (January-February, 2013)\*

Kind of advertised good			
search	experience	credible	
11,3	32,4	56,3	
44,4	51,9	3,7	
35,4	47,7	16,9	
50,0	44,1	5,9	
46,2	48,7	5,1	
36,0	45,4	18,6	
	search 11,3 44,4 35,4 50,0 46,2 <b>36,0</b>	search      experience        11,3      32,4        44,4      51,9        35,4      47,7        50,0      44,1        46,2      48,7        36,0      45,4	

Created on the results of the own empirical study

So, more than two-thirds of the investigated ads demands at least one purchase of the good to set up the correspondence between the information of the ad and real state of being. 19 % of all the ads advertise credible goods which relevancy cannot be set up at all. Among them are medical services, drugs, cosmetics, personal cleanliness goods, etc. Their impact on human is not well understood.

Matching the fact of differentiating advertising concentration on the experience and credible goods with upward dynamics of dissemination of misleading information the author has revealed the grounds not only for market power augment but for its effective exploitation as well. In the contemporary economy of information asymmetry an advertiser must not invest in product amendment to raise the price. The Table 5 consist the data to confirm this idea. There are results of correlation analysis between prices of certain advertised consumable goods and their quality that has been set as the result of three-stage blind tests.

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Product group	The coefficient of correlation between price and quality	Product group	The coefficient of correlation between price and quality
Electric meat mincer	0.59	Blender	0.54
Mineral flat water	-0.94	Cheese	1
Ice-cream	0.77	Hairdryer	0.49
Nectar multivit	0.78	Oil heater	-0.19
Pickled champignon	0.24	Servelat	0.08
Sunflower oil	-0.3	Red caviar	0.83
Earl grey tea	-0.31	Milk 2.5 %	0.83
Canned corn	0.47	Eggs	0.79
Water filter (jar)	0.94	Raisins	-0.08
Teflon pan	0.4	Margarine	0.97
Canned sprats	0.83	Rice	0.76
Pelemene with pork and beef	0.64	Orange juice	-0.34
Breadmaker	0.31		•
Average value of the	0.4		

Table 5. Correlation between price and quality of consumable goods in Ukraine\*

Created on the results of the own empirical study

The value of coefficient of correlation fluctuates significantly by product groups. For such goods as cheese, margarine and water filters the coefficient of correlation tends to the one, while for orange juice, oil, earl grey tea and mineral flat water it is negative. Average value of coefficient of correlation is 0.4. That means a rather low level of correlation between variables.

Of course, advertising cannot be the only one reason of the low level of correlation between price and quality of investigated goods. There is a lack of evidences for such a causal relationship. The only one that can be set definitely is the inefficiency of information function serving by differentiating advertising. It leads to the lack of consumer awareness about the real features of goods and services as a key element of information asymmetry and to the augment of market power of information holders.

### **IV.CONCLUSION**

Theoretical and empirical analysis of the paper has shown that informative advertising, which is considered to be beneficial for public, has turned into the sudden risk zone for every consumer and the whole economy as well. Informative advertising today often aims not at informing consumers but at managing the individual consumers' utility functions, at its deforming to maximize welfare of advertiser. In the contemporary economy of information asymmetry informative advertising has been losing the features of the source of market information rapidly. Now it is rather the mechanism of conscious manipulation of consumer choice aimed the creation and augment of market power of an advertiser, the vehicle of its economic rent maximization, than the source of market information.

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