HOW SHOULD A THEORY OF THE FIRM INCORPORATE ADVERTISING? (THINKING ABOUT THE ECONOMIC ROLE OF ADVERTISING IN THE FIRM)

Abstract. This article discusses the role of advertising expenses within the economic theory of the firm. In marketing and advertising textbooks advertising expenses are, from the perspective of the economic theory of the firm, viewed too narrowly. In contrast, standard economics textbooks start with the unrealistic perfect competition firm where advertising is not needed, while for the imperfect competition firm they extend the profit maximisation motive and concentrate on the optimisation of advertising expenses. The paper favours a more realistic, investment approach to advertising expenses which highlights problems such as the determination of advertising budgets in different firms in the network depending of their position, and the role marketing/advertising managers play within the chain of principal-agent relations in the firm. These topics are fundamentals of the transaction cost theory of the firm which does not (sufficiently) explore advertising as an important tool for reducing transaction costs. The investment and transaction cost approach to the role of the firm’s advertising are complementary.

Keywords: advertising, naive sales response, optimisation, Post Keynesian economics, transaction costs

Introduction

Advertising is rapidly changing today, mostly as a consequence of the Internet. The borders between advertising and other textbook-classified marketing communications tools are becoming more and more blurred. Irrespective of these changes, the simple question of how much a firm should spend to influence consumers to buy its products still remains challenging for new economics, marketing and other social scholars. The
principles of ad spending are also paradigmatic for other marketing communications and public relations activities.

In a recent textbook *The Theory of the Firm: Microeconomics with Endogenous Entrepreneurs, Firms, Markets, and Organizations* (Cambridge University Press, 2009) the author, Daniel F. Spulber from Northwestern University, ambitiously declares several times that he “presents a general theory of the firm” (Spulber, 2009: ix, 1). His theory of the firm is based on transaction cost theory: he sees the firm as a transaction institution, essentially having a to make-or-buy choice. One would expect such an approach to extensively cover advertising as an important method of influencing transaction costs. Yet Spulber’s book suggests that advertising and advertising strategy are, generally taken, unimportant in the theory of the firm and in microeconomics. The term advertising does not appear in the subject index; only advertising agency and marketing myopia, essentially a marketing term, appear once (Spulber, 2008: 76 and 183). This “denial” of the importance of advertising within the theory of the firm also has consequences for teaching advertising in economics courses; namely, Spulber says that his book is also “useful in teaching economics” (Spulber, 2009: x).

In a review of Spulber’s book, Hart (2011) considers the problems which should be (but are not sufficiently) included in the modern theory of the firm. (The title of this article is paraphrasing the title of Hart’s review). Although Hart’s critique of points that are missing deepens and broadens some topics of the theory of the firm, even his paper does not include advertising and marketing communications.

In contrast, in the real world, we see big oil, retail and automobile companies with the highest revenues and profits in the top ten of Fortune’s list of companies which spend vast sums on advertising based on refined advertising strategies. Even in a small transition economy such as Slovenia, advertising in firms has quite a long tradition even though Slovenia and former Yugoslavia were, after WW II until Slovenia declared its independence, classified as a mixture of a command and market economy in which marketing and advertising were, except in a few cases, unimportant as a strategic tool for firms’ economic success. Evidence says that advertising spending on the macroeconomic level reaches 1 to 2% of GDP, while in some “advertising intensive” industries, such as cosmetics, firms spend even 30–50% of their sales revenues on advertising (5–10% in industrial equipment). In this sense, a general microeconomic theory of the firm should also incorporate advertising.

The paper generally discusses the economic role of advertising within the theory of the firm as presented in marketing management, advertising and economic textbooks. It is organised in four parts. In the first part, we deal with definitions of advertising in a sample of standard marketing and
advertising textbooks, pointing out their economic implications. In the second part, the opposite approach is taken: a short review of the treatment of advertising in economics textbooks is discussed, concentrating on the dominant profit-maximising approach to advertising. In the third part, the alternative investment approach to advertising is outlined. The fourth part deals with extending the transaction cost theory of the firm with advertising. In the concluding section, we compare the realism and relevance of different approaches.

The Non-Economic Approach to Advertising

Definitions of advertising in marketing textbooks which do not imply “some” economics are rare, e. g.: “Advertising is communication via a recognisable advertisement placed in a definable advertising medium, guaranteeing delivery of an unmodified message to a specified audience in return for an agreed rate for the space and time used” (Crosier, in Pickton and Broderick, 2001: 457) or modern “advertising does not exist in isolation of the other tools of marketing communications” and that “edges of modern communications are blurred” (Baker and Hart, 2008: 328).

Most of the definitions of advertising in marketing and marketing communications textbooks include economic or, better put, financial aspects, usually stressing that advertising must be paid. Here are some examples (italics M. L.): “Advertising is the use of paid mass media, by an identified sponsor, to deliver marketing communications to target audiences” (Pickton and Broderick, 2001: 455). Burnett is more specific: “Advertising is any paid form of nonpersonal presentation and promotion of ideas, goods, and services by an identified sponsor to a targeted audience and delivered primarily through the mass media” (Burnett, 1998: 279). Hollensen is even more specific: “Advertising is a non-personal communication that is paid for by an identified sponsor, and involves either mass communication via newspapers, magazines, radio, television, and other media (e. g. billboards, bus stop signage) or direct-to-consumer communication via direct mail” (Hollensen, 2003: 622). In the best selling marketing management textbook, Marketing Management, Philip Kotler’s short definition is very similar: “Advertising can be defined as any paid form of non-personal presentation and promotion of ideas, goods, or services by an identified sponsor” (Kotler et al., 2009: 691, 861). Further, in an economics manner Kotler also explains four methods of establishing the total marketing communications budget for the firm: affordable, percentage of sales, competitive parity, and objective and task. These methods can be applied to determining an advertising budget, adding that it can be changed due to specific circumstances such as product lifecycle, altered advertising of competitors, a plan to increase market shares
etc. (Kotler et al., 2009: 706–8). He also remarks that companies are dubious about whether they are overspending or underspending on advertising (Kotler et al., 2009: 735).

Wells, Burnett and Moriarty (2006: 7–10) distinguish four roles of advertising: marketing, communication, economic and societal. Regarding the economic role, advertising basically plays two roles. The first is informative, meaning that advertising helps consumers to assess value, the second is persuasive as it decreases the likelihood a consumer will switch to an alternative product. They believe it is not easy to distinguish the two roles since in practice advertising plays both simultaneously.

A more comprehensive and, regarding economic theory, analytical view of advertising is found in Belch and Belch (2009: 765). Following Albion and Farris, they stress that economists’ views on advertising can be divided into two principal schools of thought: market power and informative. The market power approach views advertising as a tool for building consumers’ loyalty, increasing profits, creating entry barriers, reducing competition etc. Proponents of this school have negative attitudes to advertising. The informative school argues, as already mentioned, that advertising reduces consumers’ search costs and increases competitiveness among firms.

In summary, a glance at the sample of advertising and marketing management textbooks shows there are some economic points of reasoning but these are not elaborated enough. We may characterise them as partially economic, even non-economic, because they do not sufficiently elaborate on the connection between advertising and a certain economic school/paradigm.

As an introductory point of an elementary economics discussion of a firm’s advertising impact, we may assume the naive (even absurd) sales response function shown in Figure 1 which illustrates that paying for more advertising results indefinitely in consumers’ recall and consequently in sales.

*Figure 1*
This naive function of the economic impact of advertising opens up the question of how much a firm should spend on advertising, which also concerns some other issues to which we turn in the next sections.

Extension of the Profit-Maximising Approach to Advertising

Normative approaches to advertising in economics textbooks vary from highly critical to approving. As an example of an extremely critical approach, based on Baran and Sweezy's (1968) Marxian analysis to advertising, we may quote Sherman et al.: “More than 90% of all advertising in the United States and other capitalist countries, however, is not information but an attempt to persuade consumers that each of several identical products is better than the others” (Sherman et al., 2008: 558). They conclude that advertising, as well as all sales efforts, are wasteful and that companies “plan the obsolescence” of their products in which advertising assists. This assertion unrealistically implies that “90% of United States and other capitalist countries’ advertising” should be abandoned (leaving aside the question of the exact empirical measurement of “90% of advertising”). At the other extreme, we find affirmation of advertising, usually based on its informative role. In Bade and Parkin’s (2004) textbook Foundations of Economics, advertising expenses are classified as a firm’s fixed costs which stimulate quantities produced and, finally, by lowering average costs, consumers get cheaper products.

However, regarding the explanation of the firm’s advertising behaviour there are not such big differences in economics textbooks on advertising. Here there is a long tradition beginning with Chamberlin (1946/1933) and later the mathematical formalisation by Dorfmann and Steiner (1954). Dorfmann and Steiner’s theorem offers principles for determining the firm’s advertising role (and budget) in neoclassical economics, which is in simplified versions explained in many introductory economics textbooks, either in explicit (e.g. Salvatore, 1997; Mankiw, 2001; Bade and Parkin, 2004; Andreosso, 2005; Hirshey, 2006) or more or less implicit forms. In the following, this mainstream approach to advertising is described.

The mainstream theory of the firm’s advertising starts with the simplest and most abstract situation: a “black box” firm determined with a technological production function operating in perfect competition. The share of a firm’s supply within the perfect competition market is negligible and it cannot influence or change the industry’s demand and price. The firm can only adapt to the price which is determined by the forces of many firms/suppliers and many consumers/demanders. The basic principle of the firm’s economic behaviour is the maximisation of profits: when this position is reached, the firm is in equilibrium. Of course, different firms have different
technologies and cost structures. This determines their equilibrium as well as their economic position i.e. revenues, profits or loss.

In perfect competition an entrepreneur – there is no separation between the owners and managers of the firm – follows the principle of the maximisation of profits. But a perfectly competitive firm does not need marketing managers, brand managers, marketing departments – their function is “useless” because they cannot change the quantity of demand for the firm’s products (the price is fixed). They would only be “an unnecessary redundant cost” for the firm. If a firm were to employ a brand manager or establish a marketing/advertising department, this would only worsen its “new equilibrium” economic position. On the other hand, if we suppose that an advertising manager can succeed in changing the price then, theoretically, we are departing from the model of perfect competition. The perfect competition model, as a starting point of the discussion of advertising, becomes irrelevant.

In conditions of imperfect competition advertising makes sense. In such a model, advertising is the most typical since the firm’s advertising expenses may move the demand curve to the right and, by strengthening the loyalty of consumers, make the demand more inelastic. The price and quantity have been changed but so too have the costs since a firm must employ someone who works on stimulating demand, pay advertising agencies, pay for media advertisements etc. The profit-maximisation principle, when applied to any productive factor as well as to advertising, includes the law of diminishing returns. The optimisation of advertising is the basic principle of the firm’s and marketing/advertising manager’s behaviour. The manager is, so the theory says, “capable” of finding an equilibrium position, an optimal balance between increasing the advertising costs and decreasing the revenues from advertising. Perloff succinctly presents the optimisation approach to advertising when he answers the question “How much to advertise”: “In short, the rule for setting the profit-maximizing amount of advertising is the same as that for setting the profit-maximizing amount of output: Set advertising or quantity where the marginal benefit (the extra gross profit from one more unit of advertising or the marginal revenue from one more unit of output) equals marginal costs” (Perloff, 2009: 420–421). The marginal principle is valid for advertising as well as for any productive factor. The naive function/approach to advertising is specified.

Some economics textbooks take quite a different approach. E. g. Frank (2000) takes a communication approach to advertising. He starts from the “strategic example” of the “market signalling” of a toad searching for a potential mate: the larger the toad is, the larger and thicker are its vocal cords, and the deeper its croak. This “marketing communication signal” guarantees that a bigger and stronger toad will soon find a mate. Similarly, in a world
of a complex and uncertain environment, a company’s bigger advertising expenses resulting in stronger, more distinctive advertisements are a signal of a promising product quality and warranty for consumers. Instead of the traditional sequence of a rational consumer, who independently votes with his money for a firm’s production of goods, a revised sequence is more realistic. Besides advertising, firms influence consumers’ choices in many ways. This approach to advertising (expenses) is different than the standard neoclassical approach, although later in the textbook the author also uses a usual perfect competition paradigm as a starting point for the analysis of advertising.

To summarise, in standard economics textbooks the economic role of advertising is “attached” to the dominant neoclassical theory of the firm and competition. The logic of the profit-maximising firm from the perfect competition model remains, mutatis mutandis, in imperfect competition. There is no difference between the costs and impacts/benefits of productive factors such as land, labour, technology... and/or advertising. A firm and its managers are, basically, optimising automatons and are “able” to optimise advertising expenses/costs (as well as other costs) so as to bring the firm into equilibrium. The message of the optimisation approach to advertising is that advertising managers permanently concentrate on the dilemma of whether to expand or reduce advertising expenses.

There are several problems inherent in this approach. The basic shortcoming of the neoclassical approach is the application of the profit-maximisation and optimisation principles to advertising. How is it possible to apply the optimisation principle using “units” of advertising? What is a “unit” of advertising, something we need to apply the principle today when most firms employ an integrated marketing communication approach? Do advertising managers in modern firms really think and behave in the optimising way (as early as 1920 John Wannamaker doubted in a frequently quoted sentence: “Half the money I spend on advertising is wasted; the trouble is I don’t know which half”). The next question is how the advertising of firm A in the industry affects the competition and competitors: does it have a predatory result, i.e., is the increase of demand for firm A taken from the competitors’ demand leaving industry demand unchanged, or has the advertising of firm A broadened industry demand, leaving the position of other firms/competitors unchanged? What has happened to the relative position of other firms/competitors? Perhaps one or some of them have even improved their position – this is a free rider advertising situation. Further, in monopolistic competition the typical unit is a large company and its managers do not have similar goals as the company’s owners. The principal-agent and moral hazard problem might emerge: top managers are in charge of deciding about perks and these expenses, of course, do not maximise
the owner’s profits. What is the position of marketing, advertising or brand managers within the principal-agent view? Do they behave in a similar way by simply following the path determined by the top managers? Can and to what degree do they influence their decisions, especially if they are a member of or close to the board?

Many of these questions are answered in the investment approach, to which we now turn.

The Investment-and-Growth Approach to Advertising

The investment approach to advertising has not been formalised in a textbook (yet). Perhaps the most succinct introduction to the investment view of advertising is Nerlove and Arrow’s statement that “advertising expenditure is similar in many ways to investment in durable plant” (Nerlove and Arrow, 1962: 129). Contrary to the neoclassical small firm in a perfect competition model and following Berle and Means (1932) and especially John Kenneth Galbraith’s (1958, also 1967) analysis of corporate reality in the 1950s, this approach realistically takes the investment processes in a big oligopoly firm – a corporation – as a focal point for discussion about advertising. The approach has been further developed by Eichner (1976), Rassuli and Rassuli (1988), Lavoie (1992) and some other Post Keynesian economists (see Lah et al. 2006–7). A complement to the Galbraithian foundations of a firm’s advertising is behavioural economics, beginning with Cyert and March’s (1963) Behavioural Theory of the Firm. In the following, we outline a synthesis of the two views on advertising.

In the Affluent Society J. K. Galbraith proposed the famous «dependence effect» (Galbraith, 1958, also 1967), criticising one of the basics of neoclassical economics: the principle of consumer sovereignty. This assumes an unrealistic paradigmatic consumer who has a choice between two goods and autonomously and urgently has to decide between them. His/her wants are determined by marginal utility and, similarly to a firm, he/she “has to” reach a position of equilibrium. Galbraith points out that corporations are capable of the affluent production of goods, which needs the permanent creation of wants. «The fact that wants can be synthesized by advertising, catalyzed by salesmanship, and shaped by the discreet manipulations of the persuaders shows that they are not very urgent» (Galbraith, 1958: 158). (Referring to the distinction between the persuasive and informative roles of advertising, Galbraith is closer to the first but, as will be shown later, this distinction is irrelevant). The consumer is not autonomous and independent: the paradigm of the sovereign consumer’s choice has to be abandoned. Although this paradigmatic case is logical (it is a very useful teaching material), it was unrealistic in Galbraith’s time and is even more unrealistic today.
The corporation’s “production” of goods and the consumer’s wants are planned in successive investment periods to attain permanent growth. This means that the competition should be seen dynamically, not statically as in neoclassical theory (see Sušjan, 2004). Advertising “expenses” are treated similarly as, and in accordance with, investments in other production factors. The investment approach to advertising therefore denies the profit-maximisation principle of a small firm in a perfectly competitive environment as a starting point of economics as well as of the advertising behaviour of the firm. Many times, even if the optimisation rule of advertising is applied, it is abandoned when the corporation decides to attain higher growth of its market share by sacrificing profits (Marris, 1966). The focal point of the investment approach to advertising is a relatively constant revenue-ad spend relationship over a longer period. Such behaviour is empirically confirmed for a small economy (see Lah, 2007 and 2009).

The decision-making process when planning an investment in advertising does not hinge upon the neoclassical maximisation of profits. As Galbraith pointed out, corporations are guided and controlled by the technosstructure and professional managers, and not by their owners (shareholders); he thus anticipated many later discussions on the principal-agent problem (see Galbraith, 2007). The managers have more information about the corporation than the owners or, to put it another way, the information is asymmetric. The basic principal-agent-problem exists not only between owners and managers but involves a complex chain of relations depending on the organisational structure of the corporation. Marketing/advertising managers are also involved (“caught”) in the chain, whether as agents if they, for example, execute the strategy determined by the CEO or upper divisions of the corporation who, in turn, act as agents towards owners, or as principals when they entrust the marketing/advertising strategy with lower management of the department or when they hire advertising agencies.

The principal-agent approach also offers a realistic and pragmatic answer regarding the determination of the firm’s advertising budget. A corporation does not follow just one aim of maximising profits, but has multiple aims, setting targets for R&D, market research, production, (new) markets, marketing and advertising ... A synthetic goal of these partial targets is growth. If/when the targets conflict, the managers, who do not have perfect information, act boundedly rationally. They behave according to the rules which proved successful in previous periods. According to behavioural economics, the most commonly used procedure to solve possible conflicting aims is the rule of thumb, which “satisfices” (not perfectly satisfies) the deciders involved. In the case of advertising, this means that the advertising budget is roughly determined as a relatively fixed part of sales from the previous planning period. Some roots of this approach can be identified in the market power
view and market signalling function of advertising as well as in the percentage of sales method of determining the advertising budget. However, what Kotler and Keller (2009) name a method should be called a principle.

The Transaction Cost Approach and Advertising – Upgrading Spulber

Transaction cost theory opposes the neoclassical view of frictionless market transactions. Market transactions are not costless and the firm as an institution tries in many ways to lower transaction costs both inside and outside the firm as exemplified in the transaction cost literature (Coase, 1937; Williamson; 1975, 1986, 1991, also see Lah, 2002). Advertising is an important tool for lowering transaction costs and these expenses (as mentioned 1–2% of GDP) deserve to be treated in a transaction-costs-based textbook.

In his transaction cost-based approach, Spulber does not see the importance of advertising. However, when he discusses firms’ contributions to the economy, he offers some points of departure for incorporating advertising. E. g., he stresses: “Firms create markets by marketing and selling goods and services, by setting up facilities such as stores and Web sites, and by arranging exchanges for commodities and financial assets. Firms adjust prices to balance their purchases and sales and thereby clear markets” (Spulber, 2009: x). Or later: “The firm achieves transaction efficiencies by creating markets and organizations...The firm can handle multilateral transactions simultaneously ...” (Spulber, 2009: 3). Agreeing with these words, we may ask how important is the strategy of advertising and consequent advertising spending when firms “create markets or clear markets”? How does a firm “handle multilateral transactions”? Advertising is one of the important tools available to do that.

An example, which offers an even clearer starting point for the incorporation of advertising, is this: “A customer buying a gallon of milk at the supermarket need not consider all the underlying transactions” (Spulber, 2009: 73). In the marketing and advertising literature, “a gallon of milk” is not a gallon of milk but a gallon with distinctive brand name resulting from the accumulation of advertising expenses. The store is not “a retail store” but a Wal Mart or Carrefour or Mercator in Slovenia. These companies also plan, together and in co-ordination with other investments, advertising expenditures of both the company’s corporate name and/or specific products sold in their chains of supermarkets. Both lower the transaction costs compared to other retail stores and “no name” gallons of milk. A silent confirmation of firms’ advertising activities is found in a chapter on the firm’s “longevity” transferring value over time, investing in a long-term reputation. Advertising is, obviously, needed.
The transaction cost approach also raises the importance of advertising and brand names of a certain firm within a network of firms. How and when do firms, as part of a hub-and-spoke network, lose their “spoke” brand names and adopt a “hub” corporate name (e.g. IKEA, retail firm giants ...)? Or perhaps, some firms can follow a hybrid, double brand name policy, still keeping and investing in its own products’ brand name? These questions involve advertising and should be answered by transaction cost theory.

Of special interest would be a deeper discussion of the principal agent-problem that is so present in the transaction cost literature and in Spulber’s book. This topic was already discussed within the Galbraithian approach to advertising.

**Concluding Remarks**

The theory of the firm is one of the basics in (micro)economics, and advertising as an empirical fact cannot be overlooked but has to be included in the theory of the firm. Different economic paradigms of the firm incorporate it in different ways. A “general” microeconomic theory of the firm should have “enough” explanatory power to incorporate advertising.

In advertising textbooks, the microeconomics of a firm’s advertising is dealt with non-economically. Their partial, more or less incomprehensive approach to the economics of the firm’s advertising is understandable since their aim is different: they take a realistic interdisciplinary approach of the role of media in society, analyse the characteristics of the media and the effectiveness of advertising messages, concentrate on the advertising techniques and plans etc.

The neoclassical microeconomic theory of the firm holds some explanatory power for advertising. Hart (2011) thinks that the black box firm taken as a starting point of economic discussion in standard modern textbooks is “a caricature” of the modern firm (Hart, 2011: 102). Its basic comparative advantage over other economic theories is its logical structure. There are also some realistic assumptions, such as diminishing returns of advertising expenses. But its starting point – a perfectly competitive firm, where advertising is sterile – makes it unrealistic. Monopolistic competition, where advertising plays a role, is a logical extension of neoclassical economics, yet concentrating on optimisation as the basic principle of advertising within the firm’s search for the equilibrium level is unrealistic. Does a brand manager have perfect information and can they calculate the marginal costs of advertising units and compare them with marginal revenue, resulting in an equilibrium position? And further, assuming they can calculate that, how can they, using many different marketing communications tools (integrated marketing communications), find the optimal marketing communication
mix? Is there any brand manager who actually makes calculations in this way?

A much more realistic approach can be found in the investment view of advertising. The starting point of the economics perspective of advertising is the importance of advertising for a big firm – a corporation – and the determination of the advertising budget viewed as an investment connecting the past and future of the corporation. The focal point of the investment approach to advertising is the determination of advertising budgets as a relatively constant percentage of a firm’s revenue. This opens the way for answering many advertising issues.

Textbooks attempting to offer “a general theory of the firm” should explicitly include advertising. Spulber’s “general theory of the firm” based on transaction cost theory, although not including advertising, has the potential to incorporate the investment approach to advertising. There are basically two connecting points. First, both approaches emphasise the key role of a hub company’s – a corporation’s – investment policy and, second, both approaches concentrate on the chain of principal-agent relations/problems and the determination of the advertising budget within them. These topics still have to be developed.

REFERENCES