2.4 Generic advertising in food supply chains

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Abstract

Generic advertising is advertising for a generic product, i.e. a product having the common characteristic(s) of a class of products supplied to the market by a group of producers. Generic advertising programmes have a long history as part of the marketing policy for many agricultural commodities. However, significant changes in the structure of agriculture, food processing and retailing currently present challenges to these programmes. Nevertheless, we argue that generic advertising can still make its own contribution to the promotional mix. Consequently, we discuss the conditions affecting the feasibility, success and failure of generic advertising in food supply chains and indicate the prospects for generic advertising.

1 Introduction

Generic advertising is advertising for a generic product, i.e. a product having the common characteristic(s) of a class of products supplied to the market by a group of producers. Recent examples of generic advertising in the Netherlands cover advertising for bread, meat and meat products, poultry, hairdressers, market research agencies, and open-air markets. Generic advertising is virtually always funded (directly or indirectly) collectively by suppliers, and therefore in the literature it is often referred to as co-operative advertising. Those two concepts, are not identical, as co-operative advertising may also involve joint brand advertising (like the recent ads for both Volvo® and a specific dealer) as well as advertising for co-branded products (like Compac® and Intel® inside).

Generic advertising has a long history as part of the marketing policy for many agricultural commodities. Generic commodity promotion is intended to help agricultural producers enhance consumer demand and to improve their competitive position in both the domestic and the foreign market. In the USA, a large portion of the funds that can be used for generic advertising are collected under federal legislation in the context of Federal Marketing orders (cf. Kohls & Uhl, 1998, p. 257). In the Netherlands and the UK both funding and administration are the domain of commodity/marketing boards

set up by industries, whereas the French promotion board SOPEXA is financed by both government and businesses.

Significant changes in the structure of food processing and retailing currently present challenges to these programmes. The rapidly increasing concentration in the agricultural industry, food processing and retailing, and the consequent emergence of branded agricultural and food products favour brand advertising over commodity advertising. So, for example, in the Netherlands, the large dairy co-operatives do not favour the generic advertising of milk because it interferes with their efforts to create brand awareness and brand images for their own company. Moreover, the increasing vertical integration of supply chains has triggered a discussion on the structure of the funding as compared to the distribution of the revenues of generic advertising (e.g. Kaiser, 2003; Krishnamurthy, 2000).

Generic advertising can be seen as a last resort when the conditions for brand advertising are not met. Clearly, it is not feasible for small companies or individual bakers, farmers, hairdressers or market stallholders to advertise on national media. None of these companies can influence total demand. Nevertheless, the increasing levels of concentration in agricultural and food supply chains would imply a gradual improvement of the conditions for brand advertising, and thus generic advertising can be expected to decline.

In this chapter we will argue that generic advertising may make its own contribution to the promotional mix, sometimes by complementing brand advertising. In the next section we will discuss the strengths and weaknesses of generic advertising for food supply chains in a dynamic marketing environment. In that section the unique contribution of generic advertising will be discussed from the conceptual point of view. The third section will elaborate on the conditions for the realisation and success of generic advertising programmes. In the fourth section we will present some future opportunities for generic advertising in the food supply chain. The concluding section will summarise the main findings of this chapter.

2   The role of generic advertising in the food supply chain

The ultimate purpose of advertising, and indeed of all other business functions, is to contribute to a profit, which guarantees a viable company and satisfies the various stakeholders of the company. Some scholars argue that advertising contributes to profit maximisation (Rossiter & Percy, 1998). Of the three factors determining profit (selling price, costs, and sales volume) it is the selling price and the sales volume that are especially within the realm of advertising objectives. Below, we will cover the impact of advertising on these two factors in the context of 'value' creation. We will refrain from the discussion whether value is created by increasing selling price while maintaining sales volume, by increasing of sales volume at a given price, or by increasing both of these. Furthermore, we will discuss the objective of advertising as the

increase of value, acknowledging that in highly competitive markets main-taining value might already be an ambitious objective. For the line of argu-ment, however, it does not matter whether the objective of advertising is to increase value, to maintain value, or to reduce value loss. We will discuss this value-generating process of generic advertising by contrasting its role with that of brand advertising.

2.1 Generic advertising versus brand advertising

In general, generic advertising aims at enlarging the total value of a product category (e.g. beef, dairy, or cotton). Brand advertising, by contrast, aims to shift the distribution of this value between sellers (Kinnucan & Clary, 1995) without necessarily expanding the total market. Markets of various basic food products are traditionally generic markets where companies try to develop national brands in order to differentiate from the generic supply, whereas in non-food markets companies launch and support branded prod-ucts in order to develop a new product category (e.g. cellular phones, com-pact discs, videos and VCRs).

In both cases it is of interest to investigate whether there may be an opti-mal portfolio of generic and brand advertising efforts, though our contribu-tion focuses on food products. In order to improve decision making about generic and brand advertising policy, such an investigation requires knowl-edge of the underlying mechanisms that govern consumer response to differ-ent advertising appeals.

A useful framework to analyse the basic influence of advertising, both generic and brand advertising, on consumer behavior is the hierarchical decision-making model of consumer behavior proposed by various consumer scientists. This model states that consumer decision making starts with a sequence of 'need arousal', 'information gathering', 'attitude formation', fol-lowed by 'preference formation' and 'purchase' (e.g. Engel et al., 1993). Ros-siter & Percy (1987) and Percy et al. (2001) translate this hierarchy of con-sumer decision making in relation to brand advertising into five communication effects: 'category need', 'brand awareness', 'brand attitude', 'brand purchase intention' and 'purchase facilitation'. The first three of these effects are experienced by all decision-makers. Only the purchaser experiences the latter two of these effects. For other people involved in the decision-making process, these latter effects can be modified into proposing, recommending or using the product. It should be noted that the former three communication effects are applicable to alternative decision-making hierarchies, like low-involvement or experiential decision making (cf. e.g. Solomon, 2002), and also to conversions of the extended problem-solving model such as limited problem solving and routinised response behavior (cf. Schiffman & Kanuk, 2003).

On the basis of the hierarchical model a closer look can be taken at the impact of generic and brand advertising on the decision process of the con-

sumer. In particular, because generic advertising emphasises general product attributes, it could be posited to affect category needs and early-stage inferences in the consumer's decision-making process, i.e. those stages associated with perception and preference of the product. However, it should be noted that in some cases generic advertising also focuses on the buying decision, e.g. 'An apple a day keeps the doctor away'. In contrast, brand advertising, with its focus on the specific attribute(s) of a brand or on the brand as such, affects primarily brand awareness and brand attitude, and later-stage inferences, namely brand choice (cf. Kinnucan & Clary, 1995).

Ward (1997) relates the effects of generic and brand advertising to the characteristics of the goods being advertised. Goods that cannot be differentiated are identified by Ward (1997) as co-operative goods. Marketing activities – these include advertising – may influence total demand, but not the definite market shares. At the other extreme, predatory goods are in a position where total demand cannot be increased, but the definite market shares may change. According to Ward (1997) generic advertising has most potential for co-operative goods, and has a diminishing effect when goods are more predatory. At some point it is no longer feasible to use generic advertising, because the products are too differentiated to emphasise common attributes. At the other end of the continuum, only brand advertising is effective for pure predatory goods, but with diminishing 'predatoriness' the feasibility of brand advertising decreases. At some point, brand advertising is no longer feasible because the products have insufficient distinguishing characteristics to benefit from the advertising exclusively.

Ward (1997) seems to assume a one-to-one relationship between product characteristics and market conditions: undifferentiated, homogeneous products are linked to markets that can grow, whereas predatory goods are differentiated products in a zero-sum market. Declining markets are left out of the discussion altogether. However, at present various differentiated products, such as new branded products with a strong health claim, are linked to growth markets and many basic undifferentiated homogeneous products, such as milk, are sold in a saturated, sometimes even a declining, market. If we label product markets that can grow and product markets that decline as 'dynamic markets' and zero-sum markets as 'fixed markets', we obtain the set of product-market combinations displayed in Table 1.

Table 1   Product-market combinations suitable for generic and/or brand advertising

	Dynamic markets	Fixed markets
Homogeneous products	Generic advertising	No advertising instrument
Differentiated products	Generic and brand ads	Brand advertising

Most products are mixed products in an intermediate position, being differentiated goods in dynamic markets (and therefore neither strictly co-operative nor strictly predatory). At the co-operative end of the continuum, agricultural commodities are increasingly facing saturated markets and are becoming differentiated, e.g. by region or country of origin (cf. Van Ittersum et al., 2003; Verlegh & Steenkamp, 1999) or by increasing the number of varieties, as in the case of table potatoes, which thus are no longer strictly co-operative goods. At the predatory end of the continuum the well-known marketing strategies of market penetration and market development (Ansoff, 1961) aim at expanding the total market for branded products, and thus render these markets not strictly fixed. This suggests that an optimal portfolio of advertising effort for differentiated products could imply the co-existence of brand and generic advertising.

Brand advertising in markets that are not purely predatory has been shown to have a generic effect (Hall & Foik, 1982; Kinnucan & Fearon, 1986; Sun & Blaylock, 1993). As all suppliers benefit from the effect of generic advertising (total demand increases without affecting the market shares, at least, if all producers have the same cost structure), it is possible that all suppliers also benefit from the generic effect of brand advertising in non-predatory markets. In a similar vein, this inadvertent generic effect of brand advertising may well account for 'brand confusion': the phenomenon identified by Häcker & Verhallen (1988) and Poiesz (1989) of other brands benefiting from brand advertising.

In a recent theoretical study Hunnicutt & Israelsen (2003) use a Dorfman-Steiner type of model examining incentives to fund brand advertisements when both generic *and* brand advertising may expand the market. They note that brand advertising has two effects. First, like a generic ad, it may expand the market. Second, it may induce customers of one firm to purchase from a competing firm instead: the branding effect. This branding effect is present only when products can be differentiated. When products cannot be differentiated, individual firm incentives to advertise are too low, because advertising increases the profits of all firms, regardless of whether they contributed to it. Consequently, fewer ads than would maximise industry profit are produced. This explains why many agricultural industries include collective programmes to purchase generic advertising designed to expand the market.

In contrast, when products are completely differentiable, the industry group does best by relying on brand advertising to expand the size of the market, rather than requiring members to fund generic advertising. Nevertheless, if the market-expanding effect is small, as is true for many agricultural commodities, very few (if any) brand advertisements are optimal from the industry profit point of view. Firms continue to advertise, however, because of the possibility of attracting customers from rivals and because advertising is necessary to avoid their customers being stolen by competitors. In this situation a collective advertising programme could prohibit industry members

from spending more on advertising than is beneficial for the industry taken as a whole (Hunnicutt & Israelsen, 2003).

In the theoretical models discussed so far, generic advertising is considered to be brand-neutral, but this neutrality may not exist if generic promotion emphasises the common characteristics of a product group, and a concurrent branded advertising campaign stresses differences. If the benefits from generic advertising from increased demand are outweighed by the possibility that generic advertising hurts producers of higher quality products by sending an unintentional signal to consumers that all generically advertised brands are of the same quality, then high-quality producers will not benefit from generic promotion. Using retail-market sales and advertising data for the U.S. prune industry Crespi & Marette (2002) provide evidence that generic advertising of prunes has slightly lowered the differentiation of competing brands, although price changes have the greatest impact on consumer purchases. On the other hand, if one firm dominates the branded advertising for a particular product, generic advertising may stimulate sales of both the brand and the generic product. Consequently, concurrent generic and branded advertising campaigns can have both complementary and competitive aspects, depending on the commodity and industry characteristics and the nature of the promotion activities (Blisard et al., 1999).

Ward et al. (1985) suggested that if generic advertising emphasises certain attributes common to all brands within a product group, then brand differentiation will probably decrease. One may also argue that generic promotions force brand advertisers to focus on those attributes that are more difficult to evaluate directly. One hypothesis, then, is that generic promotions stimulate brand advertising that aims to enhance perceived differentiation; that is, to characteristics that are less easily validated by consumers. However, brand advertisers may not like to do this and could try to pull out of collective generic promotions and stick to brand advertising only.

Nevertheless, from the informative perspective of advertising (see, for example, Bagwell, 2003) it might be short-sighted to see brand advertising solely as the opposite of generic advertising. The impact of communicating generic product characteristics in brand advertising has been analysed by Mathios & Ippolito (1998), and we will review their interesting study in some detail below.

2.2   *Generic claims through brand advertising*

Regarding the USA, Mathios & Ippolito (1998) analyse the experience in the ready-to-eat cereal market and consumption trends from surveys and food supply data to evaluate whether a policy change in the mid-1980s improved consumers' food choices. The change was a relaxation of the ban on health claims on labels, which occurred in 1985 following the introduction of Kellogg's highly publicised advertising and labelling campaign for its All-Bran cereal. This campaign explicitly used the National Cancer Institute's state-

ments on the potential relationship between fibre and cancer prevention to promote Kellogg's high-fibre cereals. The change in policy allowed food manufacturers to explicitly link diet to disease risks through health claims in advertising and labelling.

Despite growing evidence on the link between reduced cancer rates and high-fibre diets during 1978-1984, during that period there was no shift toward high-fibre cereals. However, as soon as health claims in advertising and labelling began in late 1984, there was a significant increase in the market-share-weighted fibre content of cereals (grams of fibre per ounce). Mathios & Ippolito (1998) estimate that health claims in advertising and labelling may have caused approximately 2 million more households to consume high-fibre cereals during the period 1985-1987. Moreover, in response to the growing demand for high-fibre cereals and knowing they could now advertise the health benefits of fibre, cereal manufacturers responded by developing new high-fibre cereals. It is important to note that prior to 1984, firms were permitted to disclose their fibre content on labels. Consequently, the dramatic effects on food manufacturer and consumer behavior seem to be linked to the use of the health claim rather than the ability to list the fibre content. In other words, it is important to permit firms to explain the reasons why consumers should care about fibre.

The use of health claims in the ready-to-eat cereal market also profoundly affected consumers' knowledge of the link between fibre consumption and cancer. As noted in Mathios & Ippolito (1998), FDA survey data show that consumer knowledge of the link was low and did not increase substantially in the 6 years before the introduction of health claims on labels and in advertising. After the introduction of health claims, all groups gained knowledge of the fibre-cancer link. For example, reported knowledge rose from 1.1 percent in 1984 to 18 percent in 1986 for those with less than a high school education. Knowledge levels also increased dramatically for other education groups.

In considering potential reasons why advertising had different effects than other information sources in the period prior to the introduction of health claims, Mathios & Ippolito (1998) mention a major difference between the distribution methods used by government and private advertisers. Government and general information is usually disseminated in generic form ('increased soluble fibre consumption may reduce risks of coronary heart disease') such that this information is concentrated in news and print media reports about the latest scientific studies on diet and health. Researchers have found that more educated consumers are more likely to acquire nutrition information from print media than are their less educated counterparts. In contrast, most cereal advertising is distributed through television, with a smaller portion in print media. Moreover, health-claim advertising and labelling is product-specific, so that advertising and labelling not only indicates the relationship between food characteristics and health, but also prominently features a product that contains these characteristics.

For other products, when it comes to issues such as average intakes of fat, saturated fat, and cholesterol, the analyses of data on brand market share, consumer knowledge, individual nutrient intake and per capita consumption all indicate that diets improved after food manufacturers were permitted to use health claims in advertising and labelling. Hence, Mathios & Ippolito (1998) conclude that food manufacturers' claims have significant potential to increase consumer awareness of diet-health issues and to improve consumer dietary choices, especially for groups not well reached by government and general sources of information. For these reasons, health claims policy should be designed to ensure that food companies' incentives to make truthful health claims in advertising and labelling are preserved.

General health claims are often relevant to the generic product, and scientific knowledge about healthy and unhealthy product characteristics is growing. This development offers opportunities to generic advertising. However, food companies may themselves develop new products with specific health claims, which are communicated through brand advertising.

2.3   Generic message strategy

Beliefs about attributes of the product have an impact on attitude and, in turn, attitude often influences the succeeding stages of the hierarchical consumer decision-making process. Product preferences may increase as a consequence of a more favourable attitude, and hence the quantity demanded at a given price may increase. This implies a shift in the demand curve in the well-known price-quantity diagram (Figure 1). In addition to shifting demand curves, in theory, generic advertising can make demand either more or less price elastic.
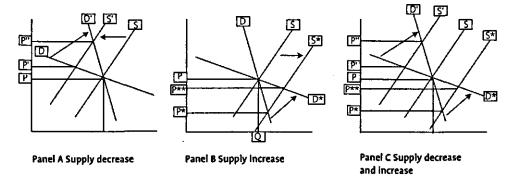
Generic advertising that conveys to the consumer information about the unique characteristics of a product, thereby reducing the range of perceived substitutes, may make the slope of the demand curve more negative and hence less price elastic (more price inelastic). This situation is advantageous for the producers if market supply is expected to decrease over time (because of, for example, steadily increasing input costs, reduced production quotas, or more stringent production controls), because then prices will rise much more than they would if the demand curve were more elastic (less inelastic).

Generic advertising can also be directed toward providing consumers with information about alternative uses of the product, thereby increasing their perception of possible substitutes and making the market demand schedule more price elastic (less price inelastic). This strategy will be optimal if the product in question is expected to undergo steady increases in supply over time (say, due to technical change), because then prices will decrease much less than they would if the demand curve were less elastic (more inelastic). Below, we illustrate why marketing strategies that increase demand elasticities are desirable when supply is increasing and elasticity-decreasing strategies are preferred when supply is decreasing (see Figure 1). In panel A of

Figure 1 the lines *D* and *S* are the pre-advertising market demand and supply curves, respectively, yielding equilibrium price and quantity *P* and *Q*, respectively. Next, at each price the supply decreases by the same amount, leading to the new supply curve *S'* and new equilibrium price *P'*. If, in addition, the absolute value of the negative demand elasticity with respect to price is decreased, the demand curve becomes *D'*. Combined with *S'* this yields equilibrium price *P''*. The shaded area shows the profit in producer surplus.

In panel B of Figure 1 the supply increases by the same amount at every price level. The new equilibrium price is *P**. However, if the absolute value of the negative demand elasticity with respect to the price is increased, then the equilibrium price will increase to *P***, leading to a profit in the producer surplus as indicated by the shaded area.

Figure 1   Effects of advertising-induced rotations of the demand curve and supply shifts on producer surplus

Panel A Supply decrease   Panel B Supply Increase   Panel C Supply decrease
                                                            and increase

Source: adopted from IDF (1991)

In panel C of Figure 1 the market is divided into two segments. The first segment is formed by the current consumers (on the left of *Q*). These consumers have a reservation price that is higher than the equilibrium price *P*. The second segment consists of the potential consumers (on the right of *Q*). These consumers are not yet buying because their reservation price is lower than the current equilibrium price *P*. The ideal advertising strategy now is to use a different advertising message to target each segment separately. The advertising copy designed for consumers with a relatively high reservation price should stress unique product attributes. Advertising copy for consumers with a relatively low reservation price should stress alternative product uses. The resulting L-shaped demand curve formed by *D'* on the left of *Q* and *D** on the right of *Q*, will enhance price increases associated with reductions in supply and will attenuate price decreases associated with increases in supply,

yielding a net increase in the producer surplus, as supply fluctuates between S' and S", equal to the sum of the two shaded areas in panel C (cf. IDF, 1991).

Along the lines of the foregoing analysis it can be seen that advertising that shifts the demand curve outwards affects price as well as quantity (except in the extreme case where supply is perfectly elastic). The less elastic the supply schedule is, the greater the price response and the smaller the quantity response. The more elastic the supply schedule is, the smaller the price response and the greater the quantity response.

3 Conditions for success of generic advertising programmes

For most agricultural commodities, the implementation of generic programmes grew out of the need for farmers to have more direct influence on the marketing of their products. As farms grew larger and agribusiness firms became more concentrated, farmers became more distant from the ultimate consumers of their products. Farms were and still are small in size and large in number relative to the purchasers of their products. Consequently, they have organised generic promotion through industry institutions such as commodity boards and marketing boards. In the USA so-called check-off programmes can be set up under federal legislation; these industry-funded marketing and research programmes are designed to increase domestic and/or international demand for an agricultural commodity through promotion, research and new product development, and a variety of other marketing tools.

Through generic advertising programmes, farmers are able to put together enough money to run large information programmes to inform consumers of the attributes of their commodity and the products made from it. A generic programme could be supported entirely by its funders. No taxpayer or government funds have to be involved. Contribution can be based on a percentage of net sales or assessed at a set rate per production unit.

The ability to implement generic advertising and promotion programmes depends on several commodity characteristics and industry characteristics that contribute to the success of a generic advertising programme. Meulenberg (1986), Van Dam (1990), Forker & Ward (1993) and Ward (1997) provide lists of fundamental commodity and industry characteristics that will influence whether or not an industry can successfully use generic promotion programmes. Since the items of their lists are quite similar, we refrain from giving references after each separate item. According to the lists of the quoted sources the following commodity characteristics must be considered:

1   First of all, the marketing problems and/or opportunities of the generic product must be of a *structural character*.
2   The product must be reasonably *homogeneous* with respect to those aspects on which the advertising is focussed. With respect to other aspects, the products of the various participants may differ. Furthermore, the homo-

geneity of the product has to be perceived by the recipients of the advertising as well.

3 The product must not lose most of its *identity* as it moves through the supply chain to the final consumer. It becomes more difficult to communicate about product attributes when the consumer cannot directly purchase the good except as an ingredient. Consequently, the role of generic advertising of the commodity declines rapidly as the product is transformed. However, many agricultural goods maintain their identity throughout the distribution process, even after transformation (e.g. pasteurised milk) and as an ingredient (e.g. bread baked with special wheat).

4 The product must comply with clear *standards* that can be perceived by consumers, and these standards must be sufficient to ensure consistent qualities in reliable packaging. Generic programmes aim to identify significant product attributes that the consumer can expect to continue to experience. Hence, products with considerable variation in quality may render ineffectual any efforts to convince consumers to increase their demand for the good. Well-established grades and standards are essential to any type of commodity promotion programmes and hence point to the need for a coordinated marketing effort, in which generic advertising is but one dimension.

5 Product *availability* must be satisfactory. High levels of out-of-stock items and poor product distribution can easily render ineffectual efforts to gain long-term repeat purchases.

6 The product must not have an excessive number of *substitutes*. Although the number of substitutes may point to the need for advertising the specific commodity, the expected gains from advertising and promotions are expected to be lower when there are many substitutes for the advertised good.

7 The product must have a *consumption potential*. Hence, there should be opportunity for increasing per capita consumption or slowing down a decline in per capita consumption. Many food products already have a high level of consumption and the potential for large increases in demand is limited.

8 The product must have a *variety of uses*. The range in variation expands the potential clientele to which advertising and promotional signals may be successfully directed. Generally, the importance of generic advertising is more limited when the commodity has few uses.

9 The product must have an *information potential*, i.e. the potential consumer should not yet have a good general understanding or be continuously conscious of the product attributes and uses. Consumers' knowledge level and experience with the product will have a major effect on the potential benefits expected to result from generic advertising.

10 The product must be checked for the *dynamics* in its market in terms of product characteristics and the set of potential consumers. If major changes among the consumer base are likely and the attributes of the

good have changed, then the need and potential gains from generic advertising may increase.

In addition to the characteristics of the commodity, the characteristics of the industry are also relevant to predict the success of a generic advertising programme. The following industry characteristics are listed in the aforementioned references:

1 The market for the product shows such a degree of *dynamics* that the resulting marketing questions cannot be solved by the price mechanism alone and by marketing operations of individual sector members, as these operations are inefficient because of diseconomies of scale. The market dynamics often refer to changes in purchase patterns and usage patterns of consumers, a changing field of competition, changes in channels of distribution, government regulations, prices and quality of the product, and method and size of production. In reality, a situation with no changes at all does not exist, but those markets closest to such a situation are less suitable for marketing programmes at the sector level.

2 The industry must not be *monopolised* by a few large firms. Generally, the expected benefits and equity from generic commodity programmes decrease when one or a few firms control the industry. See also the next point of this list.

3 *Supply response* (including imports) to rising prices must not offset all promotional gains. Generally, all farmers should benefit from the programme and not a few large firms who have been able to quickly increase supplies. Moreover, the more inelastic the supply, the greater the potential gains flowing back to the industry from advertising.

4 The generic programme must be organised in such a way that there is hardly any room for '*free-riders*', i.e. individuals who share in the benefits but are not willing to pay the appropriate share of the costs.

5 Companies *cannot individually* find a satisfying solution to the marketing problem of the homogeneous or generic product.

6 The *turnover* of the individual companies is highly dependent on the homogeneous or generic product.

7 The producers within the industry must have *common objectives*. If producers have different marketing objectives, then it is virtually impossible to fund and carry out co-operative advertising programmes.

8 The participating companies must each have their *own identity* that sets them apart from their competitors.

9 The industry/group of co-operating producers must be *large* enough to underwrite a major advertising campaign. Inadequate funding levels may lead to wasted efforts, in particular if there is a threshold effort level needed to reach potential consumers as well as ensure programme continuity.

10 Geographical *dispersion* of production must not be too large to cause problems of co-ordination. The only farmers who will participate are those who sell their produce in the region at which the generic advertising programme is targeted. Hence, there must be some overlap between the markets which the various participants supply. If participants supply different markets, they will have little interest in joining a marketing programme at the sector level.

11 The *distribution system* must be reliable. The success of any information programme depends on the product reaching the final destination without delays and in the right condition, and on distribution uncertainty being at a minimum.

12 An *administrative structure* must exist or be established to support the programme. Although a generic advertising programme is directed by its funders, it must be managed by a professional staff. Funders are responsible for allocating funds and approving business plans and programmes. As in any business, the professional staff are accountable to their board to meet performance-based goals. Of course, the fact that there is a tradition of generic advertising facilitates its organisation.

Both lists above set forth a basic set of conditions that every industry must evaluate when considering a generic advertising programme. Significant problems with one or more of these basic conditions can lead existing or planned programmes to fail. A large number of studies have considered models to formalise the relationship between advertising success and the conditions for this success. A recent result from these efforts is the supply chain model by Kinnucan (2003), which predicts the impact of food industry market power on farmers' incentives to promote in a situation where funds for promotion are raised through a per-unit assessment on farm output and where food industry production is characterised by input substitution. Our own simulations with this model reveal that a certain level of power of the food industry in both input and output markets may contribute to the success of farmers' generic advertising programmes. The market power of the food industry can be seen as a kind of output control. It prevents farmers from losing all advertising benefits by a quick and substantial increase of supply within a relatively short period. Further details of the simulations are given in Appendix I.

Reliable simulation results, however, ask for accurate estimates of the baseline values. There is a huge amount of literature on estimating demand elasticities by so-called demand system models, like the Almost Ideal Demand System (e.g. Duffy, 2002, 2003; Pesaran & Shin, 2002; Cotterill et al., 2000; Verbeke et al., 1999; Edgerton et al., 1996; Rickertsen et al., 1995). Models for supply and demand behavior of the various stages in the supply chain (retail, wholesale, food industry, farmers) are available as well (e.g. Campo et al., 2000; Thijssen, 1994; Lopez, 1985). Like the models of demand systems, how-

ever, their identification, estimation and evaluation require a large amount of data.

Fortunately, more and more data are becoming available thanks to ICT techniques that enable the tracing and tracking to be done in the supply chain as required for ECR, food security standards and Good Agricultural and Manufacturing Practices. Based on these data and new statistical techniques utilising the great advances in computer power, the aforementioned models can be integrated into one supply chain or network model that, among others, can be used to closely monitor marketing actions like generic advertising.

Until now, partial models have been used to evaluate the success of generic advertising programmes. Most evaluation studies have been done on programmes in the USA. Several of these studies report positive impacts on consumer demand for the product the generic advertising programme was promoting (e.g. IDF, 1991; Forker & Ward, 1993; Ferrero et al., 1996; Ward, 1997; Blisard et al., 1999; Kinnucan & Nichols, 1999; Kaiser, 2003). In two recent studies by Kuiper (2000, 2002), who applied vector auto-regressions and co-integration to time series (cf. DeKimpe & Hanssens, 1995, 1999) consisting of four-weekly data on consumer demand, retail price and advertising expenditure for poultry and other meat products sold in the Netherlands, the generic advertising effort appeared to be profitable for the Dutch meat sector as well.

4 'New' challenges for generic advertising

Changes in marketing of food and agricultural products have consequences for the role and importance of generic advertising. Agricultural and food producers are increasingly trying to differentiate their products in the market; product differentiation is a basic competitive strategy (Porter,1980). This trend towards product differentiation, in particular by branding, is bringing about a shift from generic commodity advertising to brand advertising. A case in point is the Dutch dairy industry, shifting from generic promotion by the Dutch Dairy Promotion Council (Nederlands Zuivelbureau) to brand promotion, in particular by the two big co-operatives, FCDF (Friesland Coberco Dairy Foods) and Campina.

However, in the meantime new marketing and production problems are emerging, often at the industry level, which give new stimuli to generic advertising. Two problem areas seem of particular relevance in this respect: (a) the sustainability and food safety of production and marketing, and (b) the poor competitive position of farming in rural areas and the resulting interest in regional products. Both problem areas often concern *groups* of farms and food companies with similar problems and opportunities. They encourage the use of collective marketing policies, such as generic advertising. We will discuss the opportunities for generic advertising in this field on the basis of

the conditions reviewed in Section 3. We have restricted ourselves to the necessary and sufficient conditions that seem most relevant in this context.

The *necessary* condition for effectiveness of collective generic advertising, i.e. homogeneity of products with respect to the attribute on which the advertising message focuses can mostly be met. For instance, many pig farmers and many poultry farmers face the problem of being perceived by society as using animal-unfriendly production methods. This problem can be tackled by generic advertising, preferably in the context of an overall sustainable marketing policy. Also *sufficient* conditions for the viability of collective generic advertising on sustainability and food safety are met: (1) the large number of small and medium-sized enterprises (SMEs) in agriculture and agribusiness make collective action less costly and more effective than individual action; (2) problems with respect to sustainability and food safety have a strong impact on product sales and consequently encourage enterprises to participate in collective generic advertising; (3) many farms specialised in one product (e.g. poultry farmers) and because they depend on that product are willing to join in collective action if there are problems in generic marketing. However, in some food and agribusiness sectors big companies are operating, which prefer to solve generic marketing problems on their own by strengthening their brand and company image, instead of joining collective programmes. Depending on the market share of such companies, collective generic advertising becomes more difficult, if not impossible.

All things being equal, the foregoing arguments on the feasibility of collective generic advertising with respect to sustainability also apply to the generic promotion of regional products.

An important aspect of generic advertising is the role the supply chain plays in the success or failure of such advertising, even if the initiative for the advertising lies with primary producers. In fact, the marketing and production procedures of middlemen, processing industry and retailers may strengthen or weaken the image of product sustainability. For this reason it is desirable for policies of the supply chain to fit the generic promotional message. This is particularly important as sustainability is a credence attribute, i.e. an attribute that a consumer cannot verify by search or by experience. The supply chain also enhances the effectiveness of generic advertising by suitable complementary marketing measures, such as on distribution policy and pricing.

To implement generic advertising on sustainability and region of origin there must be an adequate infrastructure. Of particular importance are: (i) instruments to make the market transparent with respect to sustainability and (ii) an organisation that is able to develop and execute generic advertising programmes.

(i) Transparency with respect to sustainability
One instrument to make markets transparent with respect to sustainability and region of origin is the product label (see, for instance, EEC Council, 1992;

Johansson, 1989; Loureiro & McCluskey, 2000; McIntyre et al., 2001; Sylvander et al., 2000; Tregear et al., 1998; Unterschultz et al., 1997; Van der Lans et al., 2001; Van Ittersum et al., 2003; Verlegh & Steenkamp, 1999). Environmental labels increase market transparency with respect to sustainability and differentiate products that carry the label from others that carry a label from another supplier. Labels seem effective instruments, since product attributes such as sustainability or region of origin, are credence attributes. Examples of well-known Dutch labels with respect to sustainability are: (a) EKO for organic farming; (b) environmental labels such as Milieukeur (a general environmental label), MPS (a horticultural industry B2B environmental label for ornamentals), KKM (a B2B quality label for milk, including sustainability features) and IKB (a quality scheme in the meat sector including sustainability features).

Labelling can also be used to make markets transparent with respect to region of origin. Examples of Dutch regional labels are: Limburgs Land (a range of food products, such as fresh fruit, from the Dutch province of Limburg), Flevosap (juice from the province of Flevoland); Zeeuwse Vlegel (food products, such as bread, from the province of Zeeland). In order to improve the reliability of regional labels, PDO (Protected Designation of Origin) labels are issued by the EU; these afford legal protection to specific regional products, such as Italian Parma ham and the Dutch potato variety Opperdoezer Ronde. In order to be eligible for a PDO label, the regional product must have specific characteristics that are typical for the region and already have a long tradition.

Products carrying labels that guarantee sustainability or the region of origin, can be promoted by collective generic advertising. Various questions arise with respect to the impact and effectiveness of promoting such labels. They are related to the use of environmental and regional labels in marketing policies:

(a) A basic question is to what extent the promotion of labels has an impact on the various stages of the purchasing process: awareness, perception, attitude, intention and purchase decision (e.g. Van Ittersum, 2001, on regional products; Schifferstein & Oude Ophuis, 1998, on organic foods). While much attention has been paid to consumer behavior with respect to labelled products, such as organic food, the role of promotion in stimulating demand is not yet well understood.

(b) Specific questions result from the type of labelling policy being used. Relevant alternatives are:

(b.1) Does the product carry only one label and does this label guarantee a specific product attribute, such as a specific region of origin (e.g. Flevosap), or a specific environmental characteristic (e.g. Milieukeur)? In that case the basic question posed under (a) is relevant.

(b.2) Does a product carry more than one label, or a label plus a brand name, such as a regional label (e.g. Limburgs Land) plus an environmental label (e.g. Milieukeur)? In that case, research might provide

more insight not only into the question posed under (a) but also into the interaction between the different labels in the promotional message.

(b.3) Environmental and regional labels might also be carried by shops, e.g. by butchers. It is important to find out whether and under which circumstances, labelling a shop or a farm as environmentally friendly is more effective and efficient in supporting sustainable production and marketing than product labelling. Neither this alternative of labelling shops instead of individual products nor its implications for collective generic advertising have been well investigated yet.

(b.4) The marketing of products that carry national or regional labels on international markets raises the question of to what extent foreign consumers perceive harmony or conflict between the image of the country, or region of origin, and the promise of the product label. This has implications for generic advertising.

The preceding questions open avenues for research on generic advertising. Such research might contribute to solving modern marketing problems of agricultural supply chains (cf. Caswell & Padberg, 1992).

(ii) Organisational set-up for generic advertising
An appropriate infrastructure is needed for funding, developing and executing collective generic advertising programmes. There should be an institution that has the authority to levy all companies who profit from the joint operation; the 'free-rider' problem must be excluded. Semi-public bodies which represent an industry, such as Dutch commodity boards or Marketing Boards, may have that authority. Otherwise, an institution has to be established which is supported by the great majority of enterprises profiting from the programme. In the case of sustainability labels or regional labels, the financing of the promotional programmes might be linked to an organisation of companies, which carry the label.

The development and execution of collective generic advertising programmes demand an organisational set-up which not only guarantees the freedom to develop creative promotional programmes but also ensures that these programmes fit in with the marketing policies of the participating companies. Research on the organisation of generic advertising, in particular with respect to sustainability and region of origin, is desirable.

5   Summary and conclusions

Generic advertising is advertising for a generic product, i.e. a product having the common characteristic(s) of a class of products supplied to the market by a group of producers. In general, generic advertising aims at enlarging the total value of a product category (e.g. beef, dairy, or cotton). Brand advertis-

ing, by contrast, is directed toward shifting the distribution of this value between sellers without necessarily expanding the total market. The markets for various basic food products are traditionally generic markets in which companies try to develop a national brand in order to differentiate from the generic supply. Hence, it is of interest to investigate whether an optimal portfolio of generic and brand advertising efforts exists in the food supply chain.

A common framework used by marketing researchers to analyse consumer behavior is the hierarchical decision-making model. This model states that consumer decision making starts with a sequence of 'need arousal', 'information gathering', 'attitude formation', followed by 'preference formation' and 'purchase'. Because generic advertising emphasises general product attributes, generic advertising could be posited to affect category needs and early-stage inferences in the consumer's decision-making process, i.e. those stages associated with perception and preference of the product. In contrast, brand advertising, with its focus on the specific attribute(s) of a brand or on the brand as such, primarily affects brand awareness and brand attitude, and later-stage inferences, namely brand choice.

Moreover, most products are differentiated goods in dynamic markets. Therefore, brand advertising may have a generic effect. However, if the market-expanding effect is small, as is true for many agricultural commodities, very few (if any) brand advertisements are optimal from the industry profit point of view. Firms continue to advertise, however, because of the possibility of attracting customers from rivals and because advertising is necessary to avoid having customers stolen by competitors. In this situation a collective advertising programme could prohibit industry members from spending more on advertising than is beneficial for the industry taken as a whole. Nevertheless, it might be short-sighted to view brand advertising solely as the opposite to generic advertising. In this respect, empirical evidence shows that food manufacturers' claims have significant potential to increase consumer awareness of diet and health issues and to improve consumer dietary choices, especially for groups not well reached by government and general sources of information.

Advertising that shifts the demand curve outwards affects price as well as quantity (except in the extreme case where supply is perfectly elastic).

The less elastic the supply schedule is, the greater the price response and the smaller the quantity response. The more elastic the supply schedule is, the smaller the price response and the greater the quantity response. In addition to shifting demand curves, generic advertising theoretically can make demand curves either more or less price elastic.

Generic advertising that conveys to the consumer information about the unique characteristics of a product, thereby reducing the range of perceived substitutes, may make the slope of the demand curve more negative and hence less price elastic (more price inelastic). This situation is advantageous for the producers if market supply is expected to decrease over time. In contrast, generic advertising can also be directed toward providing consumers

with information about alternative uses of the product, thereby increasing their perception of substitution possibilities and making the market demand schedule more price elastic (less price inelastic). This strategy will be optimal if the product in question is expected to undergo steady increases in supply over time.

For most agricultural commodities, the implementation of generic programmes grew out of the need for farmers to have more direct influence on the marketing of their products. The ability to implement generic advertising and promotion programmes depends on several commodity characteristics and industry characteristics that contribute to the success of a generic advertising programme. The following commodity characteristics must be considered: the marketing problems of the generic product must be of a *structural character*; the product must be reasonably *homogeneous* with respect to those aspects on which the advertising is focused; the product must not lose most of its *identity* as it moves through the supply chain to the final consumer; the product must comply with clear *standards* that can be perceived by consumers; product *availability* must be satisfactory; the product must not have an excessive number of *substitutes*; the product must have a *consumption potential*; the product must have a *variety of uses*; the product must have an *information potential*, i.e. the potential consumer should not have a good general understanding or be continuously conscious of the product attributes and uses, yet.; and the product must be checked for the *dynamics* in its market in terms of product characteristics and the set of potential consumers.

In addition to the characteristics of the commodity, the following characteristics of the industry are also relevant to predict the success of a generic advertising programme: the market for the product shows *dynamics* such that the resulting marketing questions cannot be solved by the price mechanism alone and by marketing operations of individual sector members; the industry must not be *monopolised* by a few large firms; *supply response* (including imports) to rising prices must not offset all promotional gains; there must be hardly any room for '*free-riders*'; companies *cannot individually* find a satisfying solution to the marketing problem of the generic product; the *turnover* of the individual companies is highly dependent on the generic product; the producers within the industry must have *common objectives*; the participating companies must each have their *own identity* that sets them apart from their competitors; the industry/group of co-operating producers must be *large* enough to underwrite a major advertising campaign; geographical *dispersion* of production must not be too large to cause problems of co-ordination; the *distribution system* must be reliable; and an *administrative structure* must exist or be established to support the programme.

Using a simple but representative supply chain model for simulation purposes we have shown that a certain level of power of the food industry in both input and output markets may contribute to the success of farmers' generic advertising programmes. The simulation results allow for the interpretation that market power of the food industry can be seen as a kind of output

control. It prevents farmers from losing all advertising benefits by a quick and substantial supply increase within a relatively short period.

Agricultural and food producers are increasingly trying to differentiate their products in the market. This trend towards product differentiation, in particular by branding, is bringing about a shift from generic commodity advertising to brand advertising. However, in the meantime new marketing and production problems are emerging, often at the industry level, which give new stimuli to generic advertising. Two problem areas seem of particular relevance in this respect: (a) the sustainability and food safety of production and marketing and (b) the poor competitive position of farming in rural areas and the resulting interest in regional products. Both problem areas often concern *groups* of farms and food companies having similar problems and opportunities. They encourage the use of collective marketing policies, such as generic advertising.

The implementation of generic advertising on sustainability and region of origin requires an adequate infrastructure. Of particular importance are: (i) instruments to make the market transparent with respect to sustainability and (ii) an organisation that is able to develop and execute generic advertising programmes. One instrument to make markets transparent with respect to sustainability and region of origin is the product label. Environmental labels increase market transparency with respect to sustainability and differentiate products that carry the label from others that carry a label from another supplier. In order to improve the reliability of regional labels, PDO (Protected Designation of Origin) labels are issued by the EU; these afford legal protection to specific regional products.

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Appendix I

In this appendix we discuss and elaborate on the model derived by Kinnucan (2003) to illustrate how the impacts of product and supply chain characteristics on advertising success can be quantified for prediction purposes.

The model considers a two-stage supply chain. Farmers supply an amount a of farm-based input to the food industry. The food industry combines this farm-based input with an amount b of marketing inputs (wholesaling, retailing) to produce an amount x of a retail product under conditions of constant returns to scale (CRTS). Firms in the food industry take the price of marketing services P_b as given, but have sufficient market presence to influence the price of the farm-based input P_a and the price of the retail product P_x. Hence, firms in the food industry exercise oligopoly power in the consumer market and oligopsony power in the market for the farm-based input, but are individually too small in relation to the marketing sector (wholesalers, retailers) to influence the price of the marketing inputs. Furthermore, consumer demand for the food industry's product is separable from other goods such that substitution effects can be ignored. The farm sector raises A Euro for promotion via a tax of T Euro per unit on farm output. The economy is closed and prices are determined without government interference. The firms in the food industry maximise their profits with respect to a and b.

In total the model consists of seven equations: the retail demand function (demand for x); the aggregate CRTS production function of the food industry (supply of x); the food industry's demand for farm-based input (demand for a); the food industry's demand for marketing inputs (demand for b); the farmers' supply of farm-based input (supply of a); the marketing sector's supply of marketing services (supply of b); and the advertising budget A determined as $A = Ta$, which is provided by the farmers. The model contains seven endogenous variables (P_x, P_a, P_b, x, a, b, and A), one exogenous variable (T), and eight non-negative parameters (β, η, ε_a, ε_b, ξ, θ, σ, and S_a^0), where β is the consumer demand elasticity with respect to A, η is the absolute value of the consumer demand elasticity with respect to P_x, ε_a is the farmers' supply elasticity with respect to P_a, ε_b is the marketing sector's supply elasticity with respect to P_b. ξ is the food industry's output conjectural elasticity ($\xi \in [0, 1]$ with $\xi = 0$ for perfect competition and $\xi = 1$ for pure monopoly), θ is the food industry's input conjectural elasticity ($\theta \in [0, 1]$ with $\theta = 0$ for perfect competition and $\theta = 1$ for pure monopoly), σ is the food industry's Hicks-Allen factor substitution elasticity, and S_a^0 is the farm-share term $S_a = P_a a / P_x x$ evaluated at the initial equilibrium point.

The model can be expressed in percentage changes without the need to specify the equations any further that would otherwise lead to many arbitrary restrictions being imposed. Let y^* be the vector of endogenous variables in percentage changes, H be the matrix with parameters and z^* be the vector with exogenous variables in percentage changes. Then, the model's equation system can be written as $Hy^* = z^*$ and solved to give $y^* = H^{-1}z^*$. By changing

the parameter values in H and the percentage changes in z^* a comparative statics analysis can be performed to find out about the conditions for generic advertising success in the supply chain. More specifically, parameters that are difficult to change by the farmers (σ, ε_b and $S_a{}^0$) or whose optimal value is trivial (β), are set equal to baseline values and then a grid search is performed to find the values of the other parameters that optimise farmers' profitability of the advertising programme. A sensitivity analysis with respect to the baseline values is performed as well. Table I-1 provides an overview of the results.

Table I-1   Break-even value of farmers' profit margin of investment in generic advertising and associated supply chain indicators and conditions[1]

lowest break-even profit margin and associated variables and parameters	baseline run	$\beta = 0.001$	$\sigma = 0.05$	$\varepsilon_b = 1.00$
break-even profit margin (× 100%)	7.62	3.81	3.43	3.18
	8.33	4.17	4.97	3.42
	9.52	4.76	6.18	11.57
	10.03	5.01	9.76	35.15
% change in retail price	−6.71	−18.63	−20.02	−27.88
	−6.76	−19.05	−30.11	−28.74
	−6.83	−19.65	−7.77	−1.63
	−6.86	−19.87	−6.24	−1.20
% change in farm price	5.60	15.56	20.03	23.91
	4.83	13.64	10.07	21.57
	3.80	10.94	7.79	4.09
	3.44	9.95	4.47	1.21
% change in price marketing services	1.60	4.44	6.35	15.22
	1.61	4.55	0.74	15.69
	1.63	4.69	0.95	0.74
	1.64	4.74	2.02	0.33
% change in consumer demand	4.03	11.20	14.02	19.53
	4.06	11.45	3.02	20.13
	4.11	11.81	2.34	0.98
	4.12	11.94	1.88	0.48

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1   The break-even profit margin is computed as $(A^*/(P_a{}^* + a^*))[A/P_a a]^0$, where $A^* > 0$, $(P_a{}^* + a^*) > 0$ and $[A/P_a a]^0$ is the advertising intensity evaluated at the initial equilibrium point. $[A/P_a a]^0$ is set equal to 0.05. The other baseline values are $\beta = 0.0005$; $\sigma = 0.10$; $\varepsilon_b = 2.00$; $S_a{}^0 = 0.472$; $T^* = 0.10$; and, in the model of Kinnucan (2003) we put Ψ^* and Ω^* equal to zero and deleted T in Kinnucan's equation (5). Optimisation of η, θ, ξ and ε_a is at the interval [0, 0.10, 0.20, ..., 1.00], leading to a grid search on 11^4 combinations. Instead of starting with 0, η and ε_a start with 10^{-5}. The solution must satisfy the restriction that the absolute value of all elements of y^* is less than 1 (i.e. 100%).

lowest break-even profit margin and associated variables and parameters	baseline run	$\beta = 0.001$	$\sigma = 0.05$	$\varepsilon_b = 1.00$
% change in farm-based input demand	2.80	7.76	12.02	14.35
	2.90	8.18	1.01	15.10
	3.04	8.75	1.56	0.41
	3.09	8.96	1.34	0.24
% change in demand for marketing services	3.20	8.88	12.70	15.22
	3.23	9.09	1.47	15.69
	3.26	9.38	1.90	0.74
	3.27	9.48	1.53	0.33
% change in advertising expenditure	12.80	17.76	22.02	24.35
	12.90	18.18	11.01	25.10
	13.04	18.75	11.56	10.41
	13.09	18.96	11.34	10.24
% change in turnover food industry	−2.68	−7.43	−5.99	−8.35
	−2.70	−7.60	−27.09	−8.61
	−2.73	−7.84	−5.43	−0.64
	−2.74	−7.93	−4.36	−0.71
% change in turnover farmers	8.40	23.33	32.05	38.26
	7.74	21.82	11.08	36.67
	6.85	19.69	9.35	4.50
	6.53	18.91	5.81	1.46
% change in turnover marketing services	4.80	13.33	19.06	30.43
	4.84	13.64	2.21	31.37
	4.89	14.06	2.85	1.49
	4.91	14.22	2.29	0.66
absolute value demand elasticity (η)	0.60	0.60	0.70	0.70
	0.60	0.60	0.10	0.70
	0.60	0.60	0.30	0.60
	0.60	0.60	0.30	0.40
input conjectural elasticity (θ)	0.60	0.60	0.10	0.30
	0.50	0.50	0.60	0.90
	0.30	0.30	0.70	0.00
	0.60	0.60	0.90	0.90
output conjectural elasticity (ξ)	0.90	0.90	0.90	1.00
	0.80	0.80	0.20	1.00
	0.70	0.70	0.80	0.80
	0.70	0.70	0.60	0.80
farm supply elasticity (ε_a)	0.50	0.50	0.60	0.60
	0.60	0.60	0.10	0.70
	0.80	0.80	0.20	0.10
	0.90	0.90	0.30	0.20

The results in Table I-1 are obtained conditional on reasonable baseline values for the parameters for products which, like most food products, tend more towards being co-operative goods than predatory goods and towards being experience goods rather than search goods. Each column of four outcomes is associated with the optimal to the third-best solution in terms of break-even profit margin. According to the optimal result of the baseline run, in order to recoup their expenditure on advertising, farmers should obtain a profit margin of 7.62% on the extra turnover due to the advertising program. If the actual profit margin exceeds this break-even margin, then the program is at least profitable if the absolute value of the demand elasticity equals 0.60, the input conjectural elasticity is 0.60, the output conjectural elasticity is 0.90 and the farm supply elasticity is equal to 0.50. The outcomes of the conjectural elasticities allow for the interpretation that the market power of the food industry can be seen as a kind of output control. It prevents farmers from losing all advertising benefits if supply increases quickly and substantially within a relatively short period.

The columns next to the baseline run show that the break-even profit margin can be lowered. Doubling the advertising elasticity β does not change the optimal parameter values in Table I-1, i.e. the values of η, θ, ξ and ε_a. Nevertheless, as expected, the results for the farmers improve. Halving the substitution elasticity σ requires a much smaller input conjectural elasticity. Apparently, if it becomes less easy for the food industry to substitute between farm-based input and marketing services, then the food industry must act less cautiously in the input market to allow farmers to profit from their collective advertising effort. Halving the supply elasticity of marketing services generates almost the same break-even profit margin again, but now at a somewhat larger conjectural input elasticity and a monopoly of the food industry in the consumer market. A smaller supply elasticity of marketing services makes it more profitable for the food industry to substitute farm-based input for marketing services. However, to prohibit farmers from losing all advertising benefits by a quick and substantial increase in supply within a relative short period, the food industry has to act as a monopolist in the consumer market and should also act more cautiously in the input market.

To summarise, our analysis shows that the power of the food industry in both input and output markets may contribute to the success of farmers' generic advertising programmes.