European Packaging and Recycling Regulations: Implications for Food Marketing and Trade

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Introduction

Packaging performs numerous functions throughout food production and distribution systems. Packages provide product and processor identification, nutritional information, consumer marketing messages, safety, preservation, storage, and ease of transportation (Sacharow and Griffin). These functions are carried out both within the food marketing system and for consumers after purchase during transport, and at home. The packaging industry has been very progressive in developing attributes which provide consumers with many built-in food conveniences. Supplying these conveniences has resulted in increased quantities of food packaging, especially plastic containers, in the waste stream of all Western nations (Liptak).

Increased packaging materials have contributed to conflict over how societies manage solid wastes. This conflict is more evident in European nations than in the United States. Total municipal solid wastes generated in Europe during 1991 is estimated at 50 million metric tons. Half of this total is attributed to household wastes (Paleokrassas). Packaging is estimated to constitute 25 percent of total weight and 50 percent of volume coming from household wastes. This translates into an overall contribution by packaging waste in Europe of one-eighth by weight and one-fourth by volume.

Food packaging, however, is readily identifiable by consumers as a source of household waste and has been targeted by European environmental groups for action toward reduction and reuse. Consumers have grown more conscious of the environmental consequences of their purchases and are gradually moving toward a preference for so-called green packaging. The conflict over packaging and recycling has grown especially acute in the European Union (EU) nations where the opportunity to site landfills away from population centers is extremely limited.

The goal of this paper is to evaluate the current situation in selected European nations concerning packaging and recycling regulations and discuss the implications for food marketing competition in the European Union. The role of packaging in overall food marketing is provided as background for the discussion of regulatory initiatives.

Food Packaging's Retail Role

In the early days of food marketing, consumer packaging was largely added at the point of sale for the purpose of protecting the product and preservation of its quality. In the advanced food retailing system of today, packaging must perform complex communication functions and achieve product differentiation from competing brands. Aggressive competition at retail food outlets for consumer purchases necessitates that packaging provide a food product with character and a distinct identity.

Food processors and marketers attempt to impress consumers with stylistic-ornamental messages through packaging while at the same time performing the essential practical functions. Consumers are now offered many choices among many similar products. Consumer choice is often influenced by the attractiveness and persuasiveness of messages conveyed by the packaging. Products placed on shelves in retail food outlets are expected to sell themselves through the packaging (billboarding). Recent studies (Brunazzi, 1993) indicate that 80 percent of decisions to buy everyday consumer goods are made at the point of sale. Packaging has become one of the favored consumer persuasion techniques of food marketing firms. The role of packaging in retail food merchandising and international trade must be kept in perspective as efforts to reduce and recycle packaging material in Europe is addressed in the next section.

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European Attitudes and Food Packaging

European consumers can be clustered into three groups according to their perception of packaging: Northern Europe, Latin countries, and United Kingdom (DePirey 1994). The northern group includes Germany, Belgium, Denmark, Netherlands, and Sweden. Consumers in these countries tend to be environmentally conscious and exhibit preferences for packaging that is recyclable and environmentally manageable (glass and paperboard). Consumers in France and Italy, the Latin group, are more interested in the practicality of packaging and are more willing to accept packaging designed to make products attractive and functional. These consumers are more inclined to find plastic packaging acceptable than other European consumers and are more tolerant of incineration as a means of final disposal. The third group consists of British consumers that, up to now, exhibit no discernable exigencies in terms of food packaging preferences.

The divergence of environmental interests among European consumers is reflected in differences among European nations concerning national legislation governing packaging wastes. Germany, Netherlands, and France have led the way toward enacting national legislation rather than waiting for the European Union's forthcoming packaging directive. Legislation in each of these nations is discussed in the following sections followed by an overview of the currently proposed EU Packaging Directive. This directive is expected to eventually provide uniform guidelines for all nations in the Union.

German Packaging Legislation

Germany's Packaging Ordinance was adopted in June 1991. The Ordinance mandates active management of packaging wastes rather than simply providing for disposal. The Ordinance seeks to minimize overall volume and weight of packaging, promote re-use and recycling of packaging, thereby reducing wastes that must be landfilled. The Ordinance set ambitious targets and time lines for implementation of its provisions.

The following targets and dates for collection and recycling of used packaging material are the primary elements of the Ordinance (Teale, 1992). By July 1, 1995 at least 80 percent of each individual type of packaging waste must be collected. Of the wastes collected, 90 percent of the glass and metals and 80 percent of the paper, board, plastics, and laminates are to be recycled. A system of deposits requiring at least 1 Deutschmark deposit on drinks packaging containing 1.5 liters or more went into effect on January 1, 1993. Recovery of transport and secondary packaging (shipping boxes and wrappings removed before retail sale) were subject to prior targets and deadlines in 1991 and 1992, respectively, and were relatively straight forward to accomplish by industry.

A January 1, 1993 deadline for industry to make provision for return of all *sales packaging* was the most complex issue for the food manufacturing/processing and distribution industries to meet. Sales packaging is that portion of a product's wrapping or container that a consumer actually purchases. The ordinance charged manufacturers and distributors with responsibility for recovery of their packaging and ensuring that it is reused or recycled. Industry had two alternatives for recovery of sales packaging: (1) to provide bins for collection of waste packaging at stores where products were originally purchased; and (2) to set up a quasi-public entity to carry out home collection of packaging wastes. The first option was never really seriously considered feasible because of all the difficulty involved with consumers returning the packaging. Retailers are reluctant to revert to a system of having to deal with returns either in-store or in parking area bins. The second alternative was chosen by industry as a way to set up a consumer-friendly independent collection of packaging wastes that runs parallel to municipal refuse collection systems.
The private sector company, Duales System Deutschland (DSD) was set up to collect packaging wastes and runs parallel to existing municipal waste collection systems (DSD Information Brochure). Firms become members of DSD by paying a fee for the privilege of identifying their packaging with a green dot on the label. The green dot is a distinctive logo insuring retailers and consumers alike that the packaging will be accepted by DSD. The ordinance stressed that any voluntary collection system that was initiated must harmonize its plans with existing waste collection and recycling systems.

Two main problems have arisen from the German policy placing responsibility on the private sector for the waste it produces. Germany has became a large exporter of paper and plastics packaging waste to the other EU States. Collection of materials has outstripped available recycling capacity in Germany. Thus, the excess has been shipped to other EU nations causing disruptions in the domestic recyclables markets in these nations. The United Kingdom has been the most vocal critic of the flood of subsidized German recyclables although Spain and France have also experienced substantial amounts of material originating from Germany.

Financial problems have burdened the operations of DSD (Stroetmann 1993). Companies that use the green dot on their packaging without paying the fee

have caused revenue problems for DSD. German residents responded favorably to collection services offered by DSD making the quantities collected larger than expected and the system, therefore, more costly to manage and operate. Additionally, people disposed of non-packaging; i.e., noneligible for recycling materials, via DSD at a rate equivalent to 20 percent of total collections with resulting higher operations costs. Although outcomes to date under the Packaging Ordinance have been mixed, Germany has lobbied the EU Commission to adopt its principles.

French Packaging Regulation

Eco-Emballages is a private French company which has been given exclusive approval by the French government to facilitate collection and recovery (National Trade Data Bank 1993). Eco-Emballages functions in France somewhat similar to DSD but is building on the German experience in order to avoid some of the same difficulties. Eco-Emballages collects per unit fees from manufacturers, importers, and retailers according to a price list based on the type and weight of packaging material used. The collections are then donated to municipalities to help them collect, sort, and recycle household wastes, including packaging materials.

In France only the final waste recovery target is government mandated: 75 percent of all packaging is targeted for recovery by the year 2000. In contrast to Germany, France does not specify individual targets for the quantities of each type of recovered material that must be recycled or incinerated. The objective is to reduce the quantity of material entering landfills by whatever means is most economically feasible. Flexibility to decide the best alternatives dependent on the material and recycling technology available are left to those in the food packaging, processing, and distribution system.

Almost all French supermarket companies are members or shareholders of Eco-Emballages. The policies have prompted some companies to change their packaging so as not to lose a competitive advantage due to the fees paid to Eco-Emballage. For example, Carrefour, the large French hypermarket, reduced its own label cheese packaging 13 percent in weight which reduced the packaging cost 9 percent (Chomel 1993). This reduction in packaging and fees paid for the green dot helps keep the product competitively priced.

Dutch Packaging Covenant

The Dutch Packaging Covenant, concluded in mid 1991, resulted from over 200 intensive talks between government and representatives from all interests in packaging (Alders 1993). These talks were participated in by trade and industry groups, local authorities, and environmental groups. The covenant is between the Dutch government and the packaging industry. The covenant approach was taken so that an agreement would provide incentive for both parties to make enforcement their responsibility. The covenant allowed agreement to be reached on issues which do not readily lend themselves to environmental legislation and regulation. More than 200 firms had endorsed the Dutch covenant by late 1993.

The covenant contains a so-called Ladder van Lansink, a declining scale or hierarchy of priorities for the handling of packaging waste, as follows: (a) prevention of packaging; (b) re-use of packaging products; (c) re-use of recycled packaging materials; (d) incineration with energy recovery; (e) incineration; and (f) landfill.

The important elements contained in the covenant are:

a. the quantity of all packaging materials brought on the Dutch market in the year 2000 may not be more than the quantity in the reference year 1986;
b. by the year 2000, 60 percent of all packaging that cannot be reused must be recycled to as high a grade as possible;
c. by the year 2000, the packaging chain will stop depositing packaging waste in landfills and that a maximum of 40 percent of the used packaging will be incinerated.

The Dutch government has been supportive of efforts to draft the EU packaging directive, in recognition of the need for EU-wide uniformity of packaging standards and targets.

European Packaging Directive

The European Union's approach to package waste management is embodied in the proposed EU Packaging Directive (European Report). The management of packaging and packaging waste as proposed in the Directive is an important example of the "Principle of Subsidiarity" in the European Union. This principle allows member states to establish the management system most appropriate to their particular conditions, as long as they achieve the overall targets established by the EU Directive.

The regulations as currently proposed require each state to set up a return and management system for packaging and packaging waste. Participation in such systems shall be open to all economic operators of the industrial sectors concerned. The proposal's goal is to reduce overall quantities of packaging used on the one

hand and to promote return, re-use, and recovery of packaging that continues to be used. Specifically, no later than five years after the Directive enters into force, 50 to 60 percent of packaging waste output, by weight, is to be collected. Of the amount collected, 25 to 45 percent by weight of each material is to be recycled.

Greece, Ireland, and Portugal have been allowed lower targets and an extended time limit to 2005 to meet the preceding targets. Germany, Netherlands, and Denmark resisted these targets because these nations are already at or near the levels targeted for recovery and recycling. After 10 years, the two targets will be assessed and possibly raised to as much as 90 and 60 percent, for recovery and recycling, respectively. Furthermore, recycling should lead to the production of reusable material from 25 to 45 percent of waste's weight, with no less than 15 percent per each material. A maximum of 10 percent of all packaging waste can still end up in landfills.

Marketing and Trade Implications

Although it is likely that the EU directive will eventually be passed, it will be a lengthy process for all member states to actually implement the provisions into their national laws (Latriche and Lindsey). In the intervening years there will continue to exist differences in national standards. These differences will present numerous possibilities for distortions of trade. These distortions may effect both trade among EU nations and other exporting nations to the European Union such as the United States.

Various standards related to packaging including the green dot requirements in Germany and France currently favor food processors that have made provisions to have their packaging carry such designations. Retailers and distributors are not willing to carry products which have not been granted the green dot because they are left liable for recovery and recycling of the packaging.

The currently prevailing guide for trade restrictions based on packaging is the Principle of Mutual Recognition. This principle provides that a product legally produced and sold in one EU member state can be sold in all other member states. The European court has ruled, however, that this principle does not apply if there is as conflict for environmental reasons. This ruling creates the opportunity for discriminatory practices based on packaging. For example, the court allowed the Dutch to enforce its ban on nonreturnable drink bottles because the environmental consideration superseded the trade limiting aspects of the legislation.

When the EU Packaging Directive is finally implemented in all member states' laws, it will affect all packaged products sold in the EU market. The regulations will apply to both European and non-European companies alike. Food products, along with all other packaged goods, shipped and sold in packaging that does not meet the new EU requirements will risk not being accepted at some future date, regardless of the country of origin.

When the Directive is finally implemented exporters selling packaged products in the European Union will likely find it necessary to modify their packaging to comply. In aggregate, the benefits of standardization should outweigh the compliance costs precipitated by the directive. Whether the benefits overshadow costs will vary among individual food firms and will become more estimable as the European market becomes more integrated in the future.

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