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# Couponing's Growth in Food Marketing 

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#### Abstract

The number of cents-off coupons distributed by manufacturers and retailers rose from 10 billion to 90 billion between 1965 and 1980. About 80 percent of U.S. households redeemed coupons in 1979, making coupons the most rapidly growing form of food advertising. Although coupons still make up the smallest portion of all major food advertising, their value rose from less than 6 percent of total advertising expenditures in 1970 to 11 percent in 1979. This report analyzes the use of coupons by consumers, as a marketing tool by manufacturers and retailers, and in the marketing of farm produce.


Key words: Food, retailing, coupons, coupon redemption, double couponing

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## Summary

The number of cents-off coupons distributed by manufacturers and retailers skyrocketed between 1965 and 1980, from 10 billion to 90 billion. About 80 percent of U.S. households redeemed coupons in 1979, making coupons the most rapidly growing form of food advertising. This report analyzes the use of coupons by consumers, as a marketing tool by manufacturers and retailers, and in the marketing of farm produce.

About 60 percent of the coupons redeemed in foodstores were for food, for a total value approaching $\$ 900$ million. Although coupons still make up the smallest portion of all major food advertising, their value rose from less than 6 percent of total advertising expenditures in 1970 to 11 percent in 1979. This is still less than about 25 percent of what the manufacturers spent on electronic advertising (TV, radio), and less than 50 percent of that spent on printed media or premium offers (such as trading stamps).

This Economic Research Service (ERS) study also finds that:
-Only about 1 out of 20 food coupons issued are redeemed.
-About 3.3 cents of every $\$ 10$ spent by the consumer for food goes to cover the cost of coupons.
-Coffee, prepared foods, breakfast cereal, and flour and flour mix products, which account for 10 percent of the consumer food budget, make up about 60 percent of the value of coupons redeemed.
-There is no hard evidence that food prices would drop in the absence of coupons because manufacturers could shift to other types of advertising.
-Manufacturers use coupons to introduce new products, build brand loyalty, and ensure that price reductions are passed on to the consumer.
-In general, retailers feel that couponing reduces their control over shelf space. Some retailers also view reimbursement of their handling costs as inadequate and think that double couponing (coupon redemption at twice the coupon face value) cuts their profits.
-Coupons have little effect on the demand for raw farm products because coupons are mostly used to promote food with a low farm price compared with retail price (that is, a large farm-to-retail price spread).
-Coupons are primarily issued for storable, branded items instead of less processed, perishable products.
-Coupon redemption rates are highest for coupons in or on the package; production and handling costs are also lowest for these coupons.
-The average face value of coupons is 23.5 cents.
-Daily newspaper coupons account for more than 50 percent of all coupons distributed and about 40 percent of those redeemed.
-Lower income consumers use fewer coupons than other income groups.
-Leading food firms tend to issue the most coupons.

# Couponing's Growth in Food Marketing 

Anthony E. Gallo<br>Larry G. Hamm<br>James A. Zellner*

## Introduction

The use of cents-off coupons for food or nonfood products is the fastest growing form of food promotion and advertising in recent years. This report, based on several surveys by the U.S. Department of Agriculture's Economic Research Service and on data obtained from other government sources, coupon clearinghouses, manufacturers, and retailers, analyzes:

- Coupon distribution and redemption over the past decade, how couponing has fit into overall food promotion and advertising of marketing firms, what portion of the food advertising dollar coupons account for, and in what types of media coupons are found;
- Food products that account for the bulk of coupons in grocery stores and how couponing on food products compares to nonfood items;
- Costs and benefits of coupons to consumers;
- Coupons' effects on retailer and manufacturer relationships;
- Use of coupons in marketing farm produce.

Manufacturers and retailers use coupons for several marketing and promotion purposes. Manufacturers use them to introduce new products or maintain consumer loyalty to existing products. Manufacturers and retailers can lower the price of products by placing discounts directly in the hands of consumers or selected groups of consumers, and use coupons to overcome consumer resistance to price increases. Manufacturers also find coupons useful for gaining additional control over item selection and pricing decisions of retailers.

Retailers, the bulk of whom offer their own coupons in advertisements (in-ad) and accept manufacturers.

[^0]coupons, can increase sales volume through double couponing (redeeming manufacturers' coupons for twice their face value) or offering large quantities of special merchandise tied in with manufacturers' coupon promotions. Retailers who double coupon, however, must absorb half of the price discount. Their control of shelf space is somewhat lessened by manufacturers' choice of items to discount. Although manufacturers reimburse retailers 7 cents per coupon to cover handling costs, many retailers consider the amount too small.

Cooperative farm organizations, largely concentrated in the fresh fruit and vegetable industry, have occasionally used coupons to sell abundant supplies of products such as orange juice. Perishable items do not lend themselves to couponing, however. Coupons are typically used for highly processed products because they can be distinguished easily by brand and stored for long periods. The food items accounting for the largest number and dollar value of coupons redeemed are coffee, prepared food, breakfast cereals, and cake mixes.

Consumers who use coupons benefit from price reductions, but both users and nonusers pay for their use. The full cost of promotion-coupon face value, distribution, printing, redemption, and handling costs as well as fraud and misredemption costs-is not reflected in the price savings, which has raised some concern over the distribution of the benefits and costs of couponing. Also, more coupons are issued for some products than others, leading to questions about the impact of coupons on food choice and nutrition. If coupons were not issued, food prices would not necessarily be reduced because manufacturers might shift to other types of promotion. The rapid growth of coupons indicates that they have achieved wide consumer acceptance. Four out of five households use coupons.

Because data about coupons are often not made available by private firms, some questions of broad public interest such as those mentioned have not been fully explored or answered. The research findings suggest the need for more analysis about coupon use and their impact on food marketing.

## Coupon Trends

Three trends in coupon distribution and redemption are apparent from the analysis: 1) a sharp growth in both the number of coupons distributed and redeemed, with distribution rising at a slightly faster pace than redemption; 2) rapid growth in the total value of coupons redeemed; and 3) increasing importance of coupons in food advertising and promotion.

Manufacturers' coupons distributed rose from 10 billion in 1965 to about 90 billion in 1980, with the most rapid growth occurring between 1974 and 1980 when the number of coupons rose at a yearly rate of 20 percent (fig. 1) (9). ${ }^{1}$

Some of this growth may have been related to the price and wage control mechanisms in 1973-74. Under these regulations, coupons allowed manufacturers to lower product prices without lowering published wholesale prices. There is no evidence, however, that firms issuing coupons did so specifically to bypass wage-price controls.

The increased value of coupons used for food in foodstores also has increased. When production and distribution costs and face value are combined, the value of foodstore coupons rose from an estimated $\$ 220$ million in 1974 to $\$ 550$ million in 1979 (table 1). The 1979 figure may approach $\$ 900$ million when coupons for nonfood items and coupons for food sold in nonfood stores are added.

This impressive growth, however, needs to be viewed within the total promotion of food where coupons rose from less than 6 percent of total promotional expenditures (tables 1 and 2) in 1970 to 11 percent in 1979. Coupons still make up the smallest portion of the four major types of food advertising and promotion. The electronic media (television and radio) accounted for over 40 percent of advertising expenditures in 1979, up from 32 percent a decade earlier. The printed media (newspapers and magazines) accounted for about 25 percent (table 3). Consumer premiums also accounted for about 25 percent of the total, down sharply from about 40 percent a decade ago. ${ }^{2}$ Trading stamps accounted for 25 percent of direct consumer expenditures in 1970 and only 8 percent in recent years (table 2). Coupons and particularly double couponing appear to have replaced trading stamps in trying to entice competitors' consumers. Trading stamps are given on all products purchased (brand and private label), while coupons are brand specific. Coupons create brand loyalty, while stamps create store loyalty. Couponing promotion costs are borne by couponed products.

[^1]Figure 1
Coupons Distributed, 1965-80


Table 1-Value of coupons compared with other types of food advertising and promotion ${ }^{1}$

| Type of advertising | 1970 | 1974 | 1976 | 1978 | 1979 |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  | Million dollars |  |  |  |
| Coupons $^{2}$ | 154 | 223 | 350 | 490 | 546 |
| Mass media | 954 | 1,120 | 1,572 | 2,037 | 2,334 |
| Network television | 337 | 429 | 571 | 825 | 1,006 |
| Spot television | 413 | 503 | 761 | 892 | 974 |
| Network radio | 7 | 8 | 13 | 131 | 25 |
| Spot radio | 69 | 62 | 80 | 88 | 94 |
| Magazines | 99 | 91 | 121 | 186 | 201 |
| Newspaper supplements | 9 | 14 | 15 | 16 | 17 |
| Billboards | 14 | 13 | 11 | 14 | 17 |
| Newspaper ads ${ }^{4}$ | 500 | 557 | 768 | 908 | 1,017 |
| Consumer premium advertising |  | 1,048 | 887 | 835 | 1,057 |
| $\quad$ Trading stamps | 640 | 296 | 287 | 59 | 1,219 |
| Other | 408 | 591 | 548 | 698 | 811 |
| Total value ${ }^{6}$ | 2,656 | 2,787 | 3,525 | 4,492 | 5,116 |

[^2]Table 2-Coupons as a share of total food
advertising expenditures, selected years

| Type of advertising | 1970 | 1974 | 1976 | 1978 | 1979 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percent |  |  |  |  |
| Coupons | 6 | 8 | 10 | 11 | 11 |
| Mass media | 36 | 40 | 44 | 45 | 46 |
| Network television | 12 | 15 | 16 | 18 | 20 |
| Spot television | 15 | 18 | 22 | 20 | 19 |
| Network radio | - | - | - | - | - |
| Spot radio | 3 | 2 | 2 | 2 | 2 |
| Magazines | 4 | 3 | 3 | 4 | 4 |
| Newspaper supplements | - | 1 | - | - | - |
| Billboards | - | - | - | - | - |
| Newspaper ads | 19 | 20 | 22 | 20 | 20 |
| Consumer premiums | 39 | 32 | 24 | 24 | 24 |
| Trading stamps | 24 | 11 | 8 | 8 | 8 |
| Other | 15 | 21 | 16 | 16 | 16 |
| Total | 100 | 100 | 100 | 100 | 100 |

[^3]The rate of growth in the number of coupons redeemed has not quite equaled the rate of growth in numbers distributed. Coupon redemptions doubled from 2 billion between 1974 and 1979, whereas distributions almost tripled (table 4), resulting in a slight decline in the percentage of coupons redeemed (redemption rate). In 1980, 1 out of every 20 coupons was redeemed, compared with 1 out of every 16 in 1974. This decline is not significant, however, in view of the rapid growth of distribution.

## Distribution System

In 1977, 80 percent of U.S. households used coupons and 1,000 manufacturers issued coupons (table 4) (3). Distributing billions of coupons to millions of families for thousands of products in nearly every U.S. city and town requires a highly organized and sophisticated coupon distribution system. Grocery product manufacturers begin the distribution process by creating coupons. Information from their sales, marketing, and production departments is combined with ideas and plans from their advertising agencies. Included in coupon distribution planning are decisions as to the number of coupons distributed, market areas, face value of coupons, coupon redemption

Table 3-Types of food advertising and percentage of total advertising costs, selected years

| Type of advertising | 1970 |  | 1974 |  | 1976 |  | 1978 |  | 1979 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mil. dol. | Pct. | Mil. dol. | Pct. | Mil. dol. | Pct. | Mil. dol. | Pct. | Mil. dol. | Pct. |
| Coupons | 154 | 6 | 223 | 8 | 350 | 10 | 490 | 11 | 546 | 11 |
| Electronic | 832 | 32 | 1,002 | 35 | 1,425 | 40 | 1,821 | 41 | 2,099 | 41 |
| Printed | 622 | 24 | 675 | 24 | +915 | 25 | 1,124 | 25 | 1,252 | 24 |
| Premiums | 1,048 | 39 100 | 887 | 31 | 835 | 24 | 1,057 | 24 | 1,219 | 24 |
| Total | 2,650 | 100 | 2,787 | 100 | 3,525 | 100 | 4,492 | 100 | 5,116 | 100 |

Table 4-Coupon redemption rates,

| Year | Coupons <br> distributed | Coupons <br> redeemed | Redemption <br> rate |
| :--- | :---: | :---: | :---: |
|  | Billions |  |  |
| 1971 | 20.3 | 1.5 | Percent |
| 1974 | 29.8 | 2.0 | 7.5 |
| 1976 | 45.8 | 2.5 | 6.6 |
| 1979 | 81.2 | 4.0 | 5.5 |
|  |  |  | 5.0 |

Source: (11).
life, coordinated sales and marketing activities, and the method for coupon distribution.

A simplified diagram of the coupon distribution system shows that all coupon distribution is directed at the consumers (fig. 2). Manufacturers and coupon clearinghouses are constantly searching for those specific characteristics that lead consumers to redeem coupons. The manner in which a coupon is distributed to consumers and the coupon's face value are two factors influencing consumer coupon choice.

Manufacturers' coupons can be distributed by three routes: printed (magazines and daily and Sunday newspapers), direct mail, or in/on the package. ${ }^{3}$ Most coupons are distributed to consumers through newspapers and magazines. Newspaper coupons are either single coupons or multiple offers.

Grocery stores submit redeemed coupons to their divisional center for sorting and processing. These centers send them either to the issuing manufacturers or to commercial clearinghouses which act as agents for the manufacturers. These clearinghouses play a major role in couponing. By pooling coupon redemptions from many sources, these clearinghouses can generate economies in processing coupons and in providing marketing information.

[^4]Many large brand manufacturers operate their own coupon clearing facilities. Independent clearinghouses, however, account for the bulk of couponing activity and are essential for smaller manufacturers.

## Distribution, Redemption, and Marketing Characteristics

The three routes which manufacturers use to distribute coupons (print media, direct mail, and in/ onpack) have different distribution, redemption, and marketing characteristics (tables 5, 6, and 7). Coupon distribution and redemption vary widely (table 5). The redemption rate of various types of coupons is shown by the ratio of redemptions to distributions.

Determining costs of various types of coupons is more difficult than determining distribution and redemption figures. The three basic classes of costs are distribution, production, and handling (table 6). Distribution costs are primarily fees charged by the media or direct mail firms to distribute coupons to consumers. Production costs include the artwork, plate printing, and so on in getting a coupon printed. For most print media coupons (except newspaper co-op ads, freestanding inserts, and magazine popups), only part of the production cost is allocated to coupons. A major portion of the costs are allocated to advertising, since the coupon only occupies a portion of the printed advertisement. Handling costs include the retailer's handling allowance, manufacturers' clearing cost, insurance, transportation, and so forth. These costs indicate the estimated relative costs of coupon types versus their relative redemption and distribution rates.

Daily Newspaper-Two types of daily newspaper coupons-manufacturers' single coupons in a regular run-of-press advertisement and multiple offerstogether account for more than 50 percent of all coupons distributed (table 5). Yet they account for less than 40 percent of total redemptions. They are one of the least costly forms of coupons, accounting for less than 30 percent of distribution costs and 14 percent of production costs (table 6). The cost of distributing 1,000 coupons was $\$ 4$ for regular newspaper coupons, and $\$ 1$ for co-op coupons. About 35 percent of all newspaper coupon redemptions are
redeemed within 3 months, and over 70 percent are within 6 months (table 7). Less than 3 percent of regular newspaper coupons and slightly more than 3 percent of co-op coupons are redeemed.

Newspaper coupons allow manufacturers several advantages other than timing and low cost. Since
newspapers are regional and local rather than national, geographic markets can be easily restricted and matched to demographic or competitive factors. The speed at which they can be distributed means that coupon distributions can also be tied into particular trade promotions with retailers.

Figure 2

## Coupon Distribution System



Table 5-Coupon distribution and redemption by media, 1979

| Media |  |  |  |
| :--- | ---: | ---: | ---: |
|  | Percent- <br> age of <br> total <br> distribu- <br> tions | Percent- <br> age of <br> total <br> redemp- <br> tions | Redemp- <br> tion/ <br> distribu- <br> tion <br> ratio |
| Percent |  |  |  |
| Daily newspapers | 52.3 | 39.1 | 75 |
| Sunday newspapers | 9.5 | 5.1 | 54 |
| Freestanding inserts | 14.9 | 18.6 | 125 |
| Magazines | 12.2 | 9.5 | 78 |
| Direct mail | 3.2 | 8.7 | 272 |
| In/onpack | 7.9 | 19.0 | 241 |

[^5]Tabie 6-Share of administrative costs accounted for by various distribution media, 1978

| Media | Distribution | Production | Handling | Total |
| :--- | :---: | ---: | ---: | ---: | ---: |
| Percent |  |  |  |  |
|  |  |  |  |  |
| Daily |  |  |  |  |
| newspapers | 29.3 | 13.5 | 40.1 | 34.5 |
| Sunday <br> newspapers | 6.1 | 18.9 | 3.9 | 5.5 |
| Freestanding <br> Inserts | 14.1 | 9.2 | 16.0 | 14.9 |
| Magazines | 28.1 | 24.9 | 8.7 | 17.1 |
| Direct mail | 22.4 | 6.5 | 7.6 | 13.3 |
| In/onpack | 0 | 27.0 | 23.4 | 14.6 |

Sunday Newspapers-Sunday newspapers account for about 25 percent of all coupons distributed. About 10 percent of total coupons appear in the Sunday magazine, and 15 percent in freestanding inserts. About 2 percent of magazine coupons and 5 percent of the coupons in the inserts are redeemed, both higher rates than for daily newspapers. About 5 percent of all coupon redemptions come from Sunday magazines, or half their portion of total coupon distribution. Coupons redeemed from freestanding inserts account for almost 19 percent of total coupons redeemed, considerably higher than the relative portion of total coupons distributed by this method. About 33 percent of these redemptions are within 3 months and over 70 percent within 6 months, almost the same percentages as for daily newspapers (table 7).

Total costs of Sunday newspaper coupons are higher than for daily newspaper coupons (table 8). Much of the difference is due to higher distribution costs, In 1979, the cost for distributing 1,000 coupons was $\$ 6$ for Sunday magazines and $\$ 2$ for freestanding inserts. Sunday supplements often are full-color advertising, and therefore their production costs are somewhat higher than those for other couponing formats (table 6).

Full color advertising is one main advantage that Sunday newspaper coupons have over daily newspapers. Like daily newspapers, they can be selec-

## Table 7-Redemption rates and timing, by coupon type, 1978

$\left.\begin{array}{lccc}\hline \text { Media } & \begin{array}{c}\text { Redemption } \\ \text { rates }\end{array} & \begin{array}{c}\text { Redeemed Redeemed } \\ \text { within } \\ 3 \text { months }\end{array} \\ \text { within } \\ \text { months }\end{array}\right]$
$-=$ Not computed.
${ }^{1}$ A coupon to another product issued by the same firm. Source: (14).
tively distributed on a regional basis or provide national coverage.

Magazines-Magazines account for about 12 percent of all coupons distributed but less than 10 percent of coupons redeemed. About 5 percent of magazine coupons are redeemed, while for popups, which are included in the magazine, about 3 percent are redeemed. In terms of distribution costs, onpage coupons cost about $\$ 6$ per 1,000 and $\$ 12$ per 1,000 for popups.

Magazine coupons are redeemed at a much slower rate than newspaper coupons: less than 20 percent of onpage and 12 percent of popups are redeemed within 3 months, and only 40 percent of all magazine coupons are redeemed within 6 months.

Direct-Mail Coupons-Direct-mail coupons, a packet containing coupons mailed to identifiable households usually in a co-op program, are unique in that they have the highest degree of population selectivity, and consequently, the lowest level of distribution and a very high redemption rate. However, directmail coupons have the highest distribution costs of any coupon type.

Direct mailouts account for only about 3 percent of total coupons distributed, but about 9 percent of total coupons redeemed. More than 10 percent of the coupons mailed are redeemed, considerably higher than the rate for coupons in the printed media. Distribution costs for direct-mail coupons in 1979 were $\$ 11$ per 1,000 . Mailouts accounted for more than 20 percent of distribution costs, seven times more than the numbers distributed. About 20

## Table 8-Production distribution, and handling costs as a percentage of coupon face value, by media, 1978

| Media | Production | Distribution | Handling | Total |
| :---: | :---: | :---: | :---: | :---: |
|  | Percent |  |  |  |
| Newspapers: |  |  |  |  |
| Run-of-press | 1.4 | 20.8 | 39.1 | 61.3 |
| Co-op | . 7 | 18.3 | 39.1 | 58.4 |
| Sunday sup. plement | 17.9 | 42.8 | 39.3 | 100.0 |
| Freestanding insert | 2.1 | 24.1 | 39.1 | 65.3 |
| Magazines: |  |  |  |  |
| Onpage | 17.0 | 36.1 | 39.0 | 92.1 |
| Popup | 2.5 | 150.7 | 39.1 | 192.5 |
| Direct mail | 3.1 | 80.2 | 39.1 | 122.4 |
| In/onpack | 4.2 | 0 | 39.1 | 43.4 |
| Total | 3.7 | 27.4 | 39.2 | 70.2 |

Source: (14).
percent of all redemptions take place within 3 months, and 50 percent within 6 months.

Direct-mail coupons allow the manufacturers to promote products targeted to a selected market as coupons can be mailed to neighborhoods whose residents have a specific income, family size, ethnic origin, or other characteristic. Because of this selectivity, direct-mail coupons are particularly useful for introducing new products to specific market segments. The higher distribution costs can be incorporated into the overall budget for introducing products which in most cases is substantial.

In/Onpack-In/onpack promotions for all types of products encourage repeat buying and thus promote brand loyalty. Because purchasers are already likely to have purchased the product, the redemption rate for regular in/onpack coupons is overwhelmingly the highest for any coupon type. About 18 percent of coupons found inside the package are redeemed (table 7). For coupons on the package, which generally must be cut from the package label, almost 13 percent are redeemed.

A variation of the in/onpack coupon is the "cross-in/ cross-onpack"' which is generally a coupon to another product by the same firm. The redemption rate is 7 percent for the cross-inpack, and close to 4 percent for the cross-onpack.

In/onpack in total account for nearly 20 percent of coupons redeemed. Yet they account for less than 8 percent of coupons distributed. Only 10 percent are redeemed within 3 months and only about 35 percent within 6 months.

In/onpacks have no distribution costs (tables 6 and 8) but do have handling costs and costs of redesigning product packages and labels or stuffing coupons in packages. As a percentage of their face value, in/onpack coupons have the lowest costs of any form of couponing (table 8).

## Retailer In-Ad Coupons

Retailer in-ad coupons is a separate couponing system (see fig. 2). In-ad coupons differ from manufacturers' coupons in that the retailer, not the manufacturer, offers the coupons, and the retailer does not get a handling fee for them. In addition, in-ad coupons are redeemable at only one store or chain of stores and have a short redemption period, usually 1 week. Retailers use coupons to promote their own private label products, produce, and fresh meat items. Retailer in-ad coupons are also used to promote manufacturers' brand items. Manufacturers usually provide compensation and in some cases advertising formats to retailers. Most often manufacturers offer these in-ad coupons as part of an overall wholesale price reduction to retailers and as a major advertising campaign to attract shoppers.

Because there are no handling fees and the coupons are offered for a limited time, these coupons do not flow through the normal handling channels which provide data on manufacturers' coupon use. Consequently, little is known about retailer in-ad coupons. To obtain information about in-ad coupons, the U.S. Department of Agriculture's Economic Research Service (ERS) took a 4-week survey of 50 cities in 1980 (table 9).

Over the sample period, around 68 percent of in-ad coupons were for food items and 32 percent for nonfood items. The leading food categories-soups, baby and prepared foods, oils and salad dressings, canned fish, coffee, ice cream, candy and desserts, soft drinks, and processed fruits and vegetablesaccounted for about 60 percent of the food retailer in-ad coupons. General supplies made up the largest portion of the nonfood category-16 percent. The second largest nonfood category, accounting for 13 percent of all coupons redeemed, was household supplies, products normally handled through the grocery distribution network.

## Manufacturer Coupon Redemption by Product

Coupons can lower prices to consumers. In addition, the advertising often accompanying coupon distributions increases consumer awareness about the product. The combined price/advertising impact of coupons thus increases sales of couponed products relative to those without coupons. Assessing the overall impacts of coupons on food system performance requires information about the probable impact of coupons on the types of food that consumers are encouraged to buy. ERS conducted a survey of redemptions of manufacturers' coupons for both value and number by a large grocery chain in the Washington, D.C., and Baltimore, Md., areas (7). The 16,329 coupons counted and categorized amounted to about 2.5 percent of the coupons redeemed by the chain during the week of Nov. 2-10, 1980.

The sample included representative stores in both markets with unusually high levels of coupon redemption. Redemptions for each day of the week were included with more sampling on heavy coupon days (Thursday, Friday, and Saturday). Thirty-two of a possible 833 store sales days were included in the sample. No store was surveyed more than 1 day during any survey week.

## Nonfood Redemptions

Nonfood supplies include household supplies (bags, wrapping paper, and cleaning supplies), pet food, tobacco, and general merchandise such as health and beauty aids and school supplies. In the ERS survey, these products accounted for about 39 percent of the coupons redeemed (table 10). An estimate of
nonfood sales by this grocery chain is not available, but grocery chains' nonfood sales nationally are about 15 percent of total store sales (1). This percentage suggests that the rate of coupon redemption for nonfood items in grocery stores is about three times their relative importance in the total sales picture. Within the nonfood categories, pet foods have a disproportionately high share of coupon use. Pet foods usually account for about 2 percent of store sales, but nearly 8 percent of the number and 10 percent of the value of redeemed coupons (table 10). Household supplies and general merchandise account for an additional 30 percent of the value of redeemed coupons.

## Food Redemptions

In the ERS sample, redeemed food coupon values were even more skewed toward individual product categories than in nonfood categories. Within the food-at-home category, five food groups accounted for $\$ 2$ out of every $\$ 3$ of the value of food coupons redeemed and about 1 out of every 2 coupons redeemed.

Coffee, tea, and cocoa (mainly coffee) accounted for about 20 percent of the total value of all coupons redeemed, and about 10 percent of the number of all coupons redeemed. Soups, baby foods, and prepared meals accounted for 16 percent of both the value and number of coupons redeemed. Breakfast cereals, on the other hand, also accounted for about 16 percent of coupon numbers, but only 11 percent of the total value of coupons redeemed for food because of the generally lower face values for cereal coupons. Flour mix products and processed meat, poultry, and fish (mostly canned tuna) each accounted for about 5 percent of the total value of all coupons redeemed.

Canned and processed vegetables, bread and rolls, ice cream, candy, desserts, seasonings, and spices each account for between 4 and 5 percent of the value of all coupons redeemed for food. The uneven distribution of couponing value by food category is even greater when the coupon distribution is adjusted for consumer food expenditure patterns. In table 11, a manufacturers' coupon intensity ratio (CIR) is generated by dividing the percentage of

Table 9-Percentage of retailers' in-ad coupon offers redeemed in 50 major markets, selected weeks, 1980

| Item | $\begin{gathered} \text { April } \\ 13-19 \end{gathered}$ | $\begin{aligned} & \text { July } \\ & 6-12 \end{aligned}$ | August 10-16 | $\begin{gathered} \text { September } \\ 7-13 \end{gathered}$ | Average, 4 weeks |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number |  |  |  |  |
| Coupons | 1,528 | 1,722 | 1,833 | 1,670 | 1,688 |
|  | Percent |  |  |  |  |
| Breakfast cereal | 4.0 | 3.1 | 3.7 | 2.6 | 3.4 |
| Flour and flour mixes | 6.2 | 1.8 | 3.8 | 5.0 | 4.1 |
| lce cream, candy, dessert | 3.6 | 4.5 | 4.2 | 5.0 | 4.4 |
| Oils and salad dressing | 3.9 | 5.6 | 7.2 | 5.2 | 6.0 |
| Soups, baby and prepared food | 7.1 | 6.2 | 7.3 | 7.6 | 7.1 |
| Soft drinks | 2.8 | 8.8 | 10.2 | 4.9 | 6.9 |
| Seasonings and spices | 2.2 | 2.2 | 2.2 | 1.8 | 2.1 |
| Cookies, crackers, chips, snacks | 3.5 | 3.0 | 4.3 | 3.3 | 3.6 |
| Coffee, tea, cocoa | 6.6 | 5.1 | 7.1 | 6.9 | 6.4 |
| Sugar, sirup, jelly Bread and rolls | 2.0 | 1.9 3.3 | 1.7 | 2.4 | 2.0 |
| Bread and rolls | 2.2 | 3.3 | 2.3 | 2.2 | 2.5 |
| Rice and pasta Canned and processed meat poultry fish | . 9 | . 6 | . 3 | 1.0 | .7 .7 |
| Canned and processed meat, poultry, fish | 7.1 | 7.8 | 6.4 | 6.5 | 7.0 |
| Milk, butter, cheese Processed fruits and vegetables | 3.1 | 1.6 | 2.7 | 2.0 | 2.4 |
| Processed fruits and vegetables Fresh fruits and vegetables | 6.5 | 7.3 | 4.2 | 4.7 | 2.4 5.7 |
| Fresh meat, poultry, fish | 2.5 1.8 | 2.4 3.3 | 1.9 .8 | 1.7 1.4 | 2.1 1 |
| Total food | 68.1 | 3.3 68.8 | 71.1 | 64.3 | 1.7 68.2 |
| Pet food | 1.1 | 3.3 | 1.9 | 2.8 | 2.3 |
| Tobacco | - | 3.3 | 1.9 | 2.8 | 2.3 |
| Household supplies | 14.9 | 11.9 | 13.3 | 12.6 | 13.1 |
| General supplies Total nonfood | 15.8 | 16.0 | 13.7 | 20.3 | 16.4 |
| Total nonfood | 31.9 | 31.2 | 28.9 | 35.7 | 31.8 |

[^6]total value of redeemed coupons for each group by an estimated percentage of a family's at-home food budget for that product group. The CIR indicates the importance of coupons in specific product categories. Coffee, tea, and cocoa, for instance, account for about 21 percent of the value of food coupons redeemed, yet only about 3.5 percent of the consumers' food budget. The ratio is 5.8 , which is quite high. A ratio of less than 1 indicates that relative coupon values are less than the food item's importance in the family food budget.

Table 10-Consumer redemptions of manufacturers' coupons, by product, November 1980

| Item | $\begin{aligned} & \text { Percentage } \\ & \text { of total } \\ & \text { coupons } \\ & \text { redeemed } \end{aligned}$ | $\begin{aligned} & \text { Percentage } \\ & \text { of total } \\ & \text { value of all } \\ & \text { coupons } \end{aligned}$ | $\begin{aligned} & \text { Average } \\ & \text { face } \\ & \text { value per } \\ & \text { coupon } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
|  | Percent |  | Cents |
| Beverages: Soft drinks Coffee, tea, cocoa | 1.7 6.7 | 1.8 13.1 | 24.2 45.6 |
| Milk, butter, cheese | 2.9 | 2.0 | 16.3 |
| Meat, fish, poultry, eggs: Fresh Processed | . 4.5 | . 4.9 | $\begin{aligned} & 65.8 \\ & 24.8 \end{aligned}$ |
| Fruits and vegetables: Fresh Processed | . 3.9 | . 3.9 | $\begin{aligned} & 28.5 \\ & 17.8 \end{aligned}$ |
| Cereal and bakery products: <br> Bread and rolls Cookies, crackers, chips, snacks Breakfast cereal Flour and flour mixes Rice, pasta | 3.5 2.5 9.9 3.3 1.4 | 2.6 1.8 6.9 5.0 .9 | 17.2 16.7 15.9 36.2 14.8 |
| Sugar and sweets: Sugar, sirup, jelly Ice cream, candy, dessert | 1.2 3.4 | 0.7 3.0 | 14.7 21.2 |
| Soups, baby and prepared food | 9.6 | 10.6 | 26.2 |
| Nonfood: <br> Tobacco Pet food Household supplies | $\begin{array}{r} .8 \\ 7.8 \\ 12.8 \end{array}$ | $\begin{array}{r} 2.3 \\ 9.3 \\ 11.6 \end{array}$ | $\begin{aligned} & 62.1 \\ & 28.1 \\ & 21.4 \end{aligned}$ |
| General supplies (chairs, dishes, motor oils, toiletries) | 17.3 | 15.7 | 21.4 |
| Total nonfood | 39.1 | 38.9 | 23.7 |
| Total | 100.0 | 100.0 | 23.5 |

For perishable and unbranded items such as fresh meat and produce, the CIR ratio is quite low-less than 0.10. But for breakfast cereals and cake mixes, the ratio is high-8 and 9 , respectively. The CIR for soups, baby foods, and prepared foods is 3.7 . Rice and pasta, sugar products, and salad oils also have a ratio greater than 1 . Most other food items have a CIR less than 1.

Table 11-Manufacturer's couponing intensity
$\left.\begin{array}{cccc}\hline & \begin{array}{c}\text { Percentage } \\ \text { of total } \\ \text { value of all } \\ \text { coupons } \\ \text { redeemed } \\ \text { for food } \\ \text { items }\end{array} & \begin{array}{c}\text { Estimated } \\ \text { allocations } \\ \text { of family } \\ \text { food-at- } \\ \text { home } \\ \text { dollar }\end{array} & \begin{array}{c}\text { Manufac- } \\ \text { turer's } \\ \text { coupon- } \\ \text { ing } \\ \text { intensity } \\ \text { ratio }\end{array} \\ \hline & & \text { Percent }\end{array}\right]$

Coupon redemption is unevenly divided among grocery products. Varying distribution rates, face values, and marketing strategies for different product groups account for this distribution. This research shows that, through coupons, consumers receive price reductions on highly processed and differentiated food products.

Highly couponed foods also tend to be the most highly advertised on television, radio, magazines, Sunday supplements, and billboards (table 12). Coffee, prepared foods, breakfast cereals, ice cream, candy and desserts, and soft drinks account for the bulk of

Table 12-Consumer redemption of manufacturers' coupons (food only) and five media advertising expenditures

| Item | Percentage of total coupons redeemed | $\begin{aligned} & \hline \text { Percentage } \\ & \text { of total } \\ & \text { value of } \\ & \text { all food } \\ & \text { coupons } \\ & \hline \end{aligned}$ | Five- media advertising expendi- tures |
| :---: | :---: | :---: | :---: |
|  | Percent |  | Million dollars |
| Beverages: Soft drinks Coffee, tea, cocoa | 2.79 11.00 | $\begin{array}{r} 2.95 \\ 21.44 \end{array}$ | 320.0 211.5 |
| Milk, butter, cheese | 4.76 | 3.27 | 92.6 |
| Meat, fish, poultry, eggs: Fresh Processed | .33 7.39 | 8.82 | $\begin{gathered} 0 \\ 114.0 \end{gathered}$ |
| Fruits and vegetables: Fresh Processed | .33 6.40 | 4.49 | 1.9 112.8 |
| Cereal and bakery products: |  |  |  |
| Bread and rolls Cookies, crackers, | 5.75 | 4.26 | 78.7 |
| Cookies, crackers, chips, snacks | 4.11 | 2.95 | 104.4 |
| Breakfast cereal Flour and flour | 16.26 | 11.29 | 202.4 |
|  | 5.42 2.30 | 8.18 1.47 | 55.8 108.3 |
| Sugar and sweets: Sugar, sirup, jelly Ice cream, candy, dessert | 1.97 5.58 | 1.15 4.91 | 17.9 298.4 |
| Soups, baby and prepared food | 15.76 | 17.35 | 146.7 |
| Seasonings and dressings: Seasonings and spices Oils and salad dressing | 3.12 | 1.96 | 8.8 |
|  | 657 | 4.42 | 85.7 |
| Food | 100.00 | 100.00 | 1,959.9 |

advertising in these six media. With the exception of soft drinks, these are some of the most heavily couponed food items. The coefficient of correlation between couponing and media advertising is 0.42 . When food items mainly delivered directly to stores are excluded, the correlation coefficient rises to 0.64 . Foods delivered to retail stores through grocery warehouses tend to be promoted in similar proportions with media advertising and couponing. Direct-store delivery may reduce the need to coordinate advertising and couponing because of more direct access that drivers or salespeople have to retailer's shelves.

## Marketing System

The cents-off coupon has many uses besides offering a price discount. The coupon is a tool for product differentiation, promotion of new products, and revitalization of an existing product's sales.

The concentration of redemptions indicates that coupons are issued for products which generally are branded, highly processed, and which can be differentiated through advertising and promotion (tables 9-12). The products have a high value added relative to farm value and are storable-rarely perishable-as coupons do not expire for several months up to a year or more.

## Manufacturers' Use of Coupons

Coupons can be an effective marketing tool not only in obtaining new consumers for existing products, but also in influencing purchase of new products. Coupons can also be effective in maintaining brand loyalty and thus maintaining market share, and can be effectively coordinated with electronic and printed advertising. In addition to "pull" advertising, aimed at the consumer, manufacturers are simultaneously involved in "push" promotion, or acquiring retail shelf space (4). Coupons have the impact of forcing retailers to stock that product on shelves. New product introductions usually combine media advertising, manufacturers' deals, price packs, and coupons. There is no guarantee, however, that these discounts will be passed on to the consumer. The use of coupons in an introductory promotion enables the manufacturers to offer the consumer a special introductory price without disturbing the price and margin pattern they are trying to establish. Couponing may be more effective in lowering prices to consumers, since the price reduction in the form of a coupon can be placed directly in the consumer's hand.

Coupons can also be an effective tool for differentiating between price-sensitive and nonprice-sensitive consumers. Sales revenue can be increased by offering lower prices to price-sensitive consumers, (such as those who might otherwise purchase a lower
priced store brand), while not reducing the product's regular price to other consumers.

## Firm Size

Because of the types of products for which coupons are well suited (storable, branded, easily distinguished products), coupons have been the primary domain of the large food firm. Food manufacturing is a relatively concentrated manufacturing sector where large firms dominate. Numerous studies indicate that large food firms advertise out of proportion to their size, and data suggest that they also issue the greater share of coupons (2). Market concen-tration-share of sales by the four largest firms-is an indirect measure of the presence of large leading firms in an industry, and concentration is positively and significantly related to coupon intensity (table 13). ${ }^{4}$ Thus, there seems to be a tendency for leading firms to be heavier coupon issuers than other firms.

While large firms may use couponing as a part of a multimedia advertising campaign, the small firm often sees the coupon as the only promotional tool at its disposal, particularly for new product introductions. Interviews with small food processors conducted by ERS indicate that small manufacturers considered coupons to be critical to the successful marketing of new products. Couponing is much less expensive than electronic media advertising, and manufacturers said that couponing through print media was their most effective way of reaching consumers.

Small manufacturers are often at a disadvantage compared with both large manufacturers and retailers in promoting products. They sell their products through brokers and other third parties rather than their own sales offices, so they lose direct contact with their sales representatives, the retailers. Manufacturers' coupons tend to temper food distributor behavior by assuring that manufacturers' price promotions are translated into direct consumer price reductions. Coupons are an effective mechanism for assuring smaller manufacturers (who often have small advertising budgets and must rely heavily on retail trade promotions rather than direct consumer advertising) that their promotional trade activities have an impact on consumers. Several small regional manufacturers indicated that they could not compete in the brand grocery market without couponing since they could not afford to use electronic media to advertise.

Studies have found that coupons have their greatest market impact when they are tied to a complete marketing plan including retail trade promotions,

[^7]print advertising, and television advertising (6). While the absence of coordinated marketing plans make coupon programs less effective, smaller manufacturers reported that the disadvantages of not being able to advertise extensively on television were not great enough for them to abandon couponing.

## Retailers' Use of Coupons

Coupons hold two major advantages for the retailer: they can build volume on the couponed item and draw traffic into the store. But in recent years, some retailers have expressed concerns about cou-

Table 13-Market concentration and couponing intenslty ratios for food products

| Item | $\begin{array}{c}\text { Share of market Couponing } \\ \text { contracted by } \\ \text { four leading } \\ \text { manufacturers }\end{array}$ |
| :--- | :--- | :---: |
| intensity |  |
| ratio (by |  |
| value) |  |$]$

[^8]pon influence on operational aspects of food retailing. Three such issues are examined briefly here. First, double couponing strategies adopted by some retailers require them to finance additional couponing costs. Second, couponing weakens retailers' control over their shelf space and new product selection decisions. Finally, coupons can mean increased price competition for retailer house brands.

Double Couponing-Some retailers have used double couponing to draw traffic into the store and build volume. While this can be effective, retailers must pick up the extra costs of doubling the redemption value. Prices of noncouponed items may be increased to offset the double couponing cost if the retailer cannot afford to absorb or offset it by reductions in other promotional expenses.

Double, even triple, couponing has been rather widespread and sporadic, sometimes resulting in "coupon wars." An ERS survey of 50 cities during a 4 -week period in 1980 found that double couponing existed in half of these cities. Double couponing by more than one retailer existed in eight cities (table 14).

Shelf Space Control-Coupons play an important role in retailers' control of shelf space. With more than 50,000 edible items in national grocery distribution, including store brands, and about 6,000 new items introduced each year, the ability to command shelf space is critical for the successful manufacturer. Manufacturers must compete with each other and with store brands for limited shelf space and prime placements-eye level and end-of-aisle displays. Retailers with limited shelf space are in a pivotal position to determine which products will be made available to the consumer. Coupons have been used extensively, particularly for new products, to influence product display. Retailers who agree to accept coupons from customers shopping in their stores must seriously consider stocking the product or risk alienating the customer, particularly when the couponed product is part of a coordinated media campaign to introduce it on the market.

House Brands-Coupons allow manufacturers' branded products to compete more effectively with house brands which on the average sell at 20 percent less than most national brands of the same product. ${ }^{5}$ When manufacturers lower prices to consumers by decreasing wholesale prices to retailers, retailers have the option of simultaneously lowering their private brand label prices so as not to have their price pattern distorted. Coupons, especially the in/onpack type, can lower consumer prices without disturbing the existing wholesale brand/private

[^9]label pricing structure. Since coupon distributions can be sporadic and coupon redemptions last many months, it is difficult for retailers to keep their prices for private label products consistently below brand product prices.

## Farm Value and Coupons

Coupons are primarily issued for storable, branded items rather than less processed perishable products. Coupons, as other forms of advertising, may be most effective when used for products which can be distinguished from each other rather than for more homogenous products like farm commodities. Some of the farmer-owned cooperative organizations are expanding the marketing of branded products and are using coupons, but these products are few. Those products having the highest farm value compared with retail value-fresh meats, poultry, eggs,

## Table 14 -ERS survey of double couponing in selected U.S. cities, 4 selected weeks, 1980

| City | Proportion of stores offering double <br> couponing during week of: |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | April | July | August | September |
|  | $13-19$ | $6-12$ | $10-16$ | $7-13$ |


| New York | $3 / 10$ | $3 / 10$ | $6 / 10$ | $5 / 8$ |
| :--- | :---: | :---: | :---: | :---: |
| Syracuse | $3 / 7$ | $5 / 7$ | $6 / 7$ | $4 / 6$ |
| Washington | $2 / 4$ | $2 / 4$ | $2 / 4$ | $2 / 4$ |
| Buffalo | 0 | $3 / 4$ | $2 / 4$ | $2 / 4$ |
| Rochester | 0 | $3 / 5$ | $3 / 4$ | $3 / 5$ |
| Kansas City | 0 | $3 / 5$ | $4 / 5$ | 0 |
| Bridgeport | 0 | $3 / 5$ | $4 / 5$ | $1 / 5$ |
|  |  |  |  |  |
| Albany | 0 | 0 | $1 / 6$ | $1 / 6$ |
| Baltimore | $5 / 5$ | 0 |  |  |
| Newark | $4 / 5$ | 0 |  |  |
| Philadelphia | $4 / 6$ | $1 / 6$ | $1 / 6$ | $1 / 6$ |
| Providence | $3 / 4$ | 0 | 0 | 0 |
| Jacksonville | $1 / 6$ | $1 / 5$ | 0 | 0 |
| Cincinnati | $1 / 5$ | 0 | $1 / 5$ | 0 |
|  |  |  |  |  |
| Des Moines | $1 / 4$ | $1 / 5$ | 0 | 0 |
| Indianapolis | $2 / 5$ | 0 | 0 | 0 |
| Minneapolis | $1 / 4$ | $1 / 5$ | 0 | 0 |
| San Antonio | 0 | $1 / 4$ | 0 | 0 |
| Youngstown | 0 | $1 / 3$ | 0 | 0 |
| Los Angeles | 0 | $1 / 10$ | $2 / 10$ | $1 / 10$ |
| Portland | 0 | $1 / 6$ | 0 | 0 |
| Salt Lake City | 0 | $2 / 5$ | $1 / 5$ | 0 |
| Boston | 0 | 0 | $1 / 9$ | 0 |
| Norfolk | 0 | 0 | $1 / 8$ | $1 / 7$ |
| Pittsburgh | 0 | 0 | $1 / 5$ | $1 / 5$ |
| Charlotte | 0 | 0 | $1 / 5$ | 0 |
| Columbus | 0 | 0 | $1 / 4$ | 0 |
| Omaha | 0 | 0 | $1 / 4$ | 0 |
|  |  |  |  | 0 |

${ }^{1}$ One store offered triple couponing.
dairy products, and fresh produce-are the items least likely to have coupons (table 15). By contrast, those items with the lowest domestic farm valuebreakfast cereals, flour and flour mix products, soups, and baby and prepared foods-are the most likely to have coupons issued. Coffee, which accounted for over 20 percent of the value of coupons, is not domestically produced. The use of coupons as a marketing strategy to promote foods with a relatively low farm value probably has had little effect on the price paid and demand for farm products.

## Coupons and Consumers

The total expenditures for manufacturers' coupons, $\$ 1.3$ billion, accounted for about 0.3 percent of total consumer expenditures in 1980. Some of the largest items in the family food budget-fresh meats, poultry, fish, eggs, and produce-account for few coupons (see tables 9 and 10). When the value of coupons redeemed is compared with consumer expenditures for more highly processed foods and nonfoods, the CIR is much higher. Coffee, tea, and cocoa, the most heavily couponed category, account for only a small portion of the consumer food budget.

Coupons are still the smallest category of expenditure within the overall food promotion and advertising portion of the consumer food bill. They account for about 11 percent of all types of food (pull) advertising (see table 3). Also, this share is not adjusted

## Table 15-Value of coupons redeemed compared with farm value as a percentage of retail value

|  | Percentage <br> of total | Farm value <br> as a per- <br> centage of <br> retail value |
| :---: | :---: | :---: |
| Item | value of <br> coupons <br> of produced <br> food |  |


|  | Percent |  |
| :---: | :---: | :---: |
| Coffee, tea, cocoa | 21.4 | ${ }^{1} 0$ |
| Soups, baby and |  |  |
| prepared food | 17.3 | 20 |
| Breakfast cereal | 11.3 | 15 |
| Flour and flour mixes | 8.2 | 15 |
| Total | 58.2 | - |
| Milk, butter, cheese | 3.3 | 52 |
| Fresh fruits and vegetables | 5 | 28 |
| Fresh meat, poultry, |  |  |
| fish, and eggs | . 8 | 54 |
| Total | 4.6 | - |

[^10]for the direct price discount to consumers who redeem them.

## Coupon Users

The rapid growth of coupons indicates that they have achieved wide consumer acceptance. A 1977 ERS survey found that about 80 percent of all households used coupons: other surveys taken since have shown about the same portion (5).

Widespread consumer acceptance of coupons is rooted in several factors. The sharp rise in the distribution of coupons has certainly increased redemption, even though the redemption rate has not kept up with the distribution rate. But higher distribution would not necessarily result in more consumer use if consumers did not find coupons attractive. Rising retail food prices, which doubled between 1971 and 1979, have also led to more consumers using coupons to reduce food costs. The average face value of coupons increased by about two-thirds which, although less than price increases, nevertheless represents a price reduction to users.

## Nonuser Issues

Do nonusers subsidize users of coupons? Yes, because nonusers are in essence paying the costs of couponing without the offsetting compensation of the coupons' cash value. In the ERS sample, the nonuser would forego the average face value of the coupon- 23.5 cents. But the nonuser also has saved the issuer the face value plus average handling costs of 8.5 cents a coupon (table 16). Furthermore, by paying the full product price, the nonuser has provided the issuer additional revenue to use in compensating the user and paving production and distribution costs. For many nonusers of coupons, the cost of their time in clipping, sorting, and redeeming coupons exceeds the net benefits they could receive by redeeming coupons.

The amount of nonuser subsidy, however, may be small or nonexistent. Coupons represent a minor portion of the overall food advertising and promotion bill. Likewise, it cannot be proved that in the absence of coupons, manufacturers would lower prices correspondingly. Manufacturers could allocate coupon costs to more electronic, printed, or premium promotion.

The net impact of manufacturers' coupons on consumers is difficult to judge. Such a judgment requires putting monetary values on such things as consumer's time, the value to society of innovative food products which might not get consumer distribution without extensive use of coupons, and the biasing of consumer choice toward couponed products. The availability of retailer private label products, which do not carry coupon administrative
costs, gives consumers some choice about whether they want to pay for the coupon system.

The incidence of coupon use is less for lower income Americans than other income groups, possibly because they consume fewer products with high coupon use, have a lower coupon redemption rate, or have access to fewer coupons. USDA data suggest few differences in the consumption of the four leading couponed products which can be attributed to income variation (table 17). Expenditures per person for these products is about the same for all income groups. Different spending habits of lowincome consumers do not seem to account for different coupon use. No data on redemption rates by income group are available. Data from the Bureau of Labor Statistics suggest that lower income consumers spend significantly less for reading materials than those in other income groups (16). These
data tend to support the argument that lower income consumers do not have access to the 90 percent of coupons distributed through newspapers and magazines. Also, companies which specialize in directmail coupons promote their services as being directed to certain segments of consumers-such as middle- to upper middle-income groups with large families-by tailoring distribution to zip codes with those economic and demographic characteristics.

## Public Issues

Some aspects of coupon use affect all parties in the coupon process-consumers, manufacturers, retailers, advertising agencies, and clearinghouses. Consumers pay a price which covers the total cost of producing and promoting the product, whether promotion is through advertising, direct push promotion, or coupon use. But the efficiency of the pro-

Table 16-Handling distribution and production costs as a percentage of average coupon value

| Item | Average face value | Handling cost as a percentage of the face value ${ }^{1}$ | Estimated production and distribution costs as a percentage of face value ${ }^{2}$ | Total administrative costs as a percentage of face value | Net average face value to consumers ${ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cents | ----- | ---Percent- | ------ | Cents |
| Fresh meat, poultry, fish, eggs ${ }^{4}$ | 65.8 | 13 | 8 | 21 | 50.0 |
| Tobacco | 62.1 | 14 | 9 | 23 | 47.8 |
| Coffee, tea, cocoa | 45.6 | 19 | 12 | 31 | 31.5 |
| Flour and flour mixes | 36.2 | 23 | 15 | 38 | 22.4 |
| Fresh fruits and vegetables | 28.5 | 30 | 19 | 49 | 14.5 |
| Pet food | 28.1 | 30 | 19 | 49 | 14.3 |
| Soups, baby and prepared food | 26.2 | 32 | 21 | 53 | 13.9 |
| Seasonings and spices Canned and processed meat, | 26.2 | 32 | 21 | 53 | 12.3 |
| poultry, fish | 24.8 | 34 | 22 | 56 | 10.9 |
| Soft drinks | 24.2 | 35 | 22 | 57 | 10.4 |
| General supplies | 21.4 | 40 | 25 | 65 | 7.5 |
| Household supplies | 21.4 | 40 | 25 | 65 | 7.5 |
| Ice cream, candy, dessert | 21.2 | 40 | 26 | 66 | 7.2 |
| Processed fruit and vegetables Bread and rolls | 17.8 | 48 | 30 | 78 | 3.9 |
| Bread and rolls Cookies, crackers, chips, snacks | 17.2 | 49 | 31 | 80 | 3.4 |
| Milk, butter, cheese | 16.7 16.3 | 51 52 | 32 | 83 85 | 2.8 |
| Oils and salad dressing | 16.0 | 53 | 34 | 87 | 2.1 |
| Breakfast cereal | 15.9 | 53 | 34 | 87 | 2.1 |
| Rice and pasta | 14.8 | 57 | 36 | 93 | 1.0 |
| Sugar, sirup, jelly | 14.7 | 58 | 37 | 95 | . 7 |
| All groups | 23.5 | 36 | 23 | 59 | 9.6 |

[^11]motional system has a bearing on both the profits to the promoters and the final costs of products to consumers.

## Handling Costs

Production, distribution, and handling costs in 1978 amounted to 70 percent of the face value of coupons redeemed, with handling costs accounting for nearly 40 percent of face value (see table 8). The retail checkout is the point of redemption for most coupons (see fig. 2). Estimates vary as to how much it costs retailers to handle manufacturers' coupons. Handling cost estimates range from 4 cents per coupon estimated by Grocery Manufacturers Associated (GMA) to 11 cents per coupon by Giant Foods in Washington, D.C. (10). Coupon handling fees were 5 cents until they were raised recently to 7 cents.

The Food Marketing Institute in 1979 estimated the cost of coupon handling from three different sample stores. Costs ranged from slightly over 5 cents to about 9 cents per coupon (table 18). Approximately 25 percent of this cost is due to extra time spent by the bagger and checker in accepting the couponabout 5 seconds. Coupon processing at the store, which includes packaging, sorting, and transferring
to the store level and headquarters accounted for another 45 percent.

About 10 percent of the coupon cost was paid to the clearinghouse. Almost the same amount goes toward finance charges accrued between the time coupons are redeemed at the store and clearinghouse reimbursement. Store occupancy, supplies, and unacceptable coupons accounted for about another 7 percent of coupon costs (table 18).

## Misredemption and Fraud

Misredemption and fraud are the second component of consumer costs in coupon use. Fraud and misredemption can come from any number of sources: at the retail level, through clearinghouses, professional thieves, nonexistent retail outlets, newspaper dealers, at the checkout, and through mail carriers. Coupon fraud and misredemption is said to be relatively widespread, but research has not been able to pinpoint a substantiated, verifiable estimate of coupon fraud. One estimate is that between 10 and 20 percent of redeemed coupons values are fraudulent. If this is true, then the cost per coupon redeemed would be an additional 4 cents per coupon,

Table 17-Percentage of total food expenditures, by income group

| Item | Under $\$ 3,000$ | $\begin{aligned} & \$ 3,000 \\ & \text { to } \\ & \$ 3,999 \end{aligned}$ | $\begin{aligned} & \$ 4,000 \\ & \text { to } \\ & \$ 4,999 \end{aligned}$ | $\begin{aligned} & \$ 5,000 \\ & \text { to } \\ & \$ 5,999 \end{aligned}$ | $\begin{gathered} \$ 6,000 \\ \text { to } \\ \$ 6,999 \end{gathered}$ | $\begin{gathered} \$ 7,000 \\ \text { to } \\ \$ 7,999 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percent |  |  |  |  |  |
| Coffee, tea, cocoa | 11.4 | 5.3 | 5.3 | 4.7 | 5.6 | 4.9 |
| Soups, baby and prepared food | 8.1 | 4.4 | 4.3 | 4.7 | 5.4 | 5.3 |
| Breakfast cereal | 8.8 | 5.1 | 4.6 | 4.6 | 5.2 | 4.6 |
| Flour and flour mixes | 12.3 | 5.7 | 5.2 | 5.8 | 6.2 | 5.1 |
| Total food at home | 8.6 | 4.7 | 4.5 | 4.3 | 5.1 | 4.9 |
| Portion of population | 9.5 | 4.7 | 4.6 | 4.8 | 5.2 | 4.8 |
| Portion of families | 16.2 | 6.1 | 5.8 | 5.3 | 5.6 | 5.2 |
|  | $\begin{aligned} & \$ 8,000 \\ & \text { to } \\ & \$ 9,999 \end{aligned}$ | $\begin{gathered} \$ 10,000 \\ \text { to } \\ \$ 11,000 \end{gathered}$ | $\begin{gathered} \$ 12,000 \\ \text { to } \\ \$ 14,999 \end{gathered}$ | $\begin{gathered} \$ 15,000 \\ \text { to } \\ \$ 19,999 \end{gathered}$ | $\begin{gathered} \$ 20,000 \\ \text { to } \\ \$ 24,999 \end{gathered}$ | $\begin{gathered} \$ 25,000 \\ \text { and } \\ \text { over } \end{gathered}$ |
|  | Percent |  |  |  |  |  |
| Coffee, tea, cocoa | 9.8 | 11.5 | 13.3 | 14.6 | 6.9 | 6.6 |
| Soups, baby and prepared food | 11.1 | 12.3 | 14.8 | 15.2 | 7.1 | 7.3 |
| Breakfast cereal | 9.7 | 11.8 | 15.0 | 15.4 | 7.8 | 7.4 |
| Flour and flour mixes | 9.9 | 11.3 | 13.3 | 13.6 | 6.2 | 5.4 |
| Total food at home | 9.9 | 11.7 | 14.2 | 16.3 | 7.8 | 8.1 |
| Portion of population | 10.5 | 11.4 | 14.2 | 15.4 | 7.0 | 7.0 |
| Portion of families | 10.2 | 10.3 | 12.1 | 12.4 | 5.5 | 5.3 |

reducing the average value of a price reduction to 5.6 cents.

Using the mails for coupon fraud falls under the jurisdiction of the U.S. Postal Service. The U.S. Postal Service has investigated a number of cases of
fraud, but even in the peak year of 1979, the number of arrests and convictions was small. This does not mean that fraud is nonexistent, but that its detection has been limited. The cost to conduct these investigations means that all Americans, whether coupon users or not, are subsidizing coupon fraud.

Table 18-Coupon handling costs, 1979

| Function | Company A |  | Company B |  | Company C |  | Average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Cents } \\ \text { per } \\ \text { coupon } \end{gathered}$ | $\begin{gathered} \text { Percentage } \\ \text { of } \\ \text { total } \end{gathered}$ | $\begin{gathered} \hline \text { Cents } \\ \text { per } \\ \text { coupon } \end{gathered}$ | $\begin{gathered} \text { Percentage } \\ \text { of } \\ \text { total } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Cents } \\ \text { per } \\ \text { coupon } \end{gathered}$ | Percentage of coupon | $\begin{aligned} & \text { Cents } \\ & \text { per } \\ & \text { coupon } \end{aligned}$ | $\begin{gathered} \text { Percentage } \\ \text { of } \\ \text { coupon } \end{gathered}$ |
|  | Cents | Percent | Cents | Percent | Cents | Percent | Cents | Percent |
| Checkout bagger Coupon processing at the | 2.41 | 31 | 2.00 | 22 | 1.25 | 23 | 1.89 | 26 |
| store | 3.31 | 43 | 4.81 | 53 | 1.70 | 32 | 3.27 | 45 |
| Clearinghouse | . 76 | 10 8 | . 79 | 8 | . 94 | 18 | . 82 | 11 |
| Store couponing | . 20 | 2 | . 27 | 3 | . 96 | 13 4 | . 23 | 9 3 |
| Supplies and unacceptable coupons Total | 7.57 | 100 | 8.96 | $100^{3}$ | $\begin{array}{r} .41 \\ 5.22 \end{array}$ | $100^{7}$ | $\begin{array}{r} .33 \\ 7.25 \end{array}$ | $10{ }^{4}$ |
|  | Dollars |  |  |  |  |  |  |  |
| Effective hourly wage rates | 14.55 | - | 14.19 | - | 7.34 | - | - | - |
|  | Number |  |  |  |  |  |  |  |
| Weekly coupons redeemed per store | 1,165 | - | 672 | - | 1,078 | - | - | - |
| Weighted average time in seconds per coupon | 5.27 | - | 5.12 | - | 5.10 | - | - | - |

$-=$ Not applicable.
Source: Food Marketing Institute.

## References

1. Bureau of the Census, Census of Retail Trade. Washington, D.C., 1977, 1972, 1967, and 1963.
2. Connor, John M., Food Product Proliferation: A Market Structure Analysis. Working Paper No. 41. Madison, Wis.: North Central Research Project No. 117. (Revised and reprinted in the National Food Review, USDA, nos. 10 and 11, Spring and Summer 1980).
3. Gallo, Anthony E. "Food Advertising," National

- Food Review. USDA, no. 13, Winter 1981.

4. $\qquad$ and Larry Hamm, "Push Promotion in Food Marketing," National Food Review. USDA, no. 11, Summer 1980.
5. Gallo, Anthony E. and Thomas Stucker, "Coupon Use In Food Marketing," National Food Review. April 21, 1978.
6. Hamm, Larry G., "Food Distributor Procurement Practices: Their Implications For Food System Structure and Coordination," PhD dissertation, Michigan State University, 1981.
7. Giant Food, Inc., ERS Sample Survey of Coupon Redemptions, Week of Nov. 10, 1980.
8. $\qquad$ , Giant Foods Coupons: Good Business or Bad Business. 1980.
9. Marketing Corporation of America, Couponing Fact Sheet, Newspaper Co-op Coupons, 1980.
10. Hammonds, Tim and Doyle Eiler, Coupon Handling Costs, 1979, Special Research Report no. 25, Food Marketing Institute.
11. Nielsen Clearing House, A Product Manager's Guide to Effective Couponing. A.C. Nielsen Company, 1980.
12. $\qquad$ Coupon Distribution and Redemption Patterns. A.C. Nielsen Company, 1980.
13. Sloane, Martin, 1980 Guide to Coupons and Refunds. Bantam Books, March 1980.
14. Strang, Roger A., The Economic Impact of CentsOff Coupons. Nielsen Clearing House, 1980.
15. U.S. Department of Agriculture, Economics, Statistics, and Cooperative Service. The U.S. Food and Tobacco Industries. AER-451. March 1980.
16. U.S. Department of Labor, Bureau of Labor Statistics. Consumer Expenditure Survey: Diary Survey, July 1972-June 1974. Bulletin 1959. 1977.

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## Economic Research Service

The Econ $s m i c$ Research Service carries out research on the production and marketing of major agricultural commodities; foreign agriculture and trade; economic use, conservation, and development of natural resources; trends in rural population, employment, and housing; rural economic adjustment problems; and performance of the U.S. agricultural industry. ERS provides objective and timely economic information to farmers, farm organization members, farm suppliers, marketers, processors, consumers, and others who make production, marketing, and purchasing decisions, and to legislators and other public officials at the Federal, State, and local government levels.


[^0]:    *Agricultural economists, Economic Research Service. USDA.

[^1]:    ${ }^{1}$ Italicized numbers in parentheses refer to items listed in the References at the end of this report.
    ${ }^{2}$ Consumer premiums are merchandise offered to the consumer to encourage the purchase of a particular product.

[^2]:    ${ }^{1}$ Food is defined as any product humanly ingested, excluding alcoholic beverages.
    ${ }^{2}$ ERS estimates based on industry data. Excludes nonfood items purchased in grocery stores. Includes face value, handling, production, and distrubition costs. Does not include refund offers and redemptions for fast food chains.
    ${ }^{3}$ Leading National Advertisers, Inc.
    ${ }^{4}$ Newspaper Advertising Bureau.
    ${ }^{5}$ Incentive Marketing.
    ${ }^{6}$ Among items not included are: Manufacturers' and retailers' administrative and salary expenses for internal advertising and promotion staffs, fees paid to independent advertising agencies, administrative and handling costs for incentive advertising, the cost of producing games and sweepstakes, the cash value of contests and sweepstakes prizes, the value of free samples, and miscellaneous-flyers, postage, and other expenses.

    Source: (3).

[^3]:    - = Less than 0.5 percent.

[^4]:    ${ }^{3}$ Inpack coupons are inserted inside the package. Onpack are inserted on the package.

[^5]:    ${ }^{1}$ Compares the percentage of redemption to the percentage of distributions.

    Source: (14).

[^6]:    $-=$ Less than 0.5 percent.

[^7]:    ${ }^{4}$ Correlations of coupon intensity and concentration for the 47 food processing industries yielded positive correlation coefficients ranging from 0.3741 to 0.515 depending on the definition of market-whether national, regional, or local.

[^8]:    'Derived from 1972 Census of Manufactures weighted average of 4-digit SIC industries.
    ${ }^{2}$ Correlation coefficient (without fresh fruit and vegetables): national ( $n=16$ ).
    Correlation coefficient (with fresh fruit and vegetables):
    local ( $n=16$ )
    national ( $n=17$ )
    local ( $n=17$ ).

[^9]:    ${ }^{5}$ Taken from ERS estimates as derived from Selling Areas Market Inc., data.

[^10]:    - = Not applicable.
    ${ }^{1}$ Farm value of imported products not included.
    Source: ERS survey and Market Basket Statistics, USDA.

[^11]:    18.5 cents per coupon, average. This includes 7 -cent retailer handling fee plus 1.5 cents manufacturer handling and payment cost (see 14, p. 26).
    25.4 cents per coupon. A cost of 4 cents per coupon was calculated from the Nielsen data in table 6 . This 1978 based figure was adjusted by an index for advertising cost increases between 1978 and 1980 (see Agricultural Outlook, USDA, ESS, January-February, 1980, p. 32).
    ${ }^{3}$ Calculated by subtracting the proportion of face value accounted for by administrative costs from the average face value of that commodity group.

