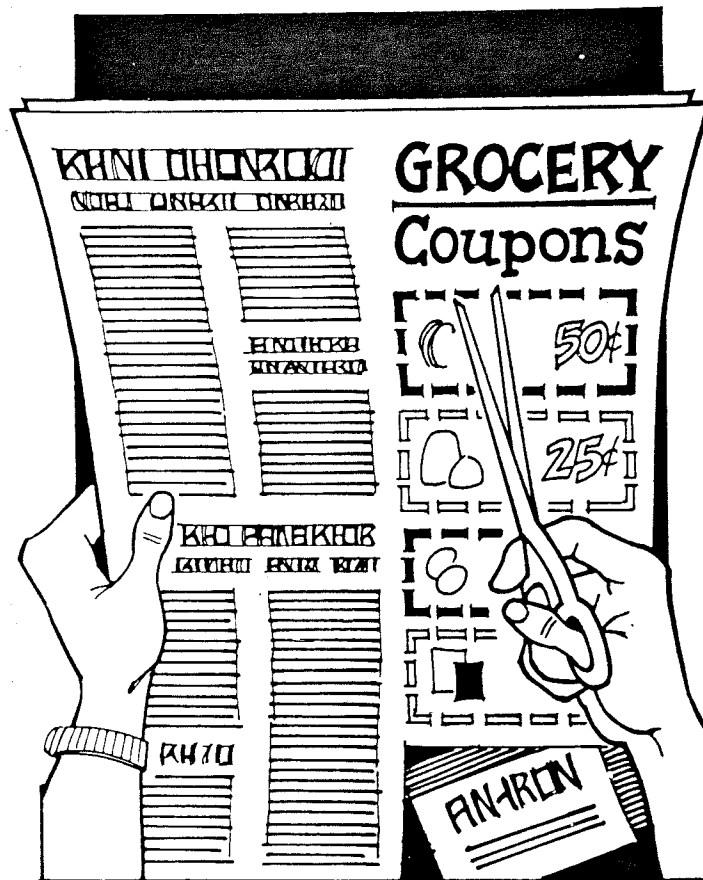


# Consumer Segmentation Analysis of Grocery Coupon Users



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December 1988

A.E. Res. No. 88-17

CONSUMER SEGMENTATION ANALYSIS OF  
GROCERY COUPON USERS

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ABSTRACT

Coupons have become one of the fundamental means by which today's manufacturers attempt to communicate with consumers and influence their marketplace choices. Their use as a promotional technique for consumer non-durables has grown dramatically in the last five years. However, despite this growth and their economic importance, consumer behaviors and attitudes towards coupons has been a virtually unresearched topic.

The purpose of this research was to elicit consumers' perceptions and behaviors towards grocery coupons, and to segment consumers into groups based on resulting similarities and differences.

To identify these perceptions and the underlying market segments, 2,000 New York State households were randomly selected from telephone directories and surveyed by mail questionnaire. A response rate of 82.3 percent was achieved. Frequency analysis, chi-square analysis, factor analysis, and cluster analysis techniques were implemented to develop profiles of various consumer segments.

Over 92 percent of the consumers surveyed use coupons at least occasionally. The most important factors cited by consumers which lead to coupon use are past experience with the product, the face value of the coupon, and whether the coupon is for a new product they already intend to try.

A number of demographic characteristics emerged which significantly influence coupon use. The actual work status of the female head of the household plays a limited role in influencing coupon use. Rather, it is orientation towards family and career that explained more of the underlying attitudes of consumers. The most influential variable in prompting coupon use was household size. The coupon user versus non-user segments, as well as various user segments, are discussed.

The consumer segments discussed have implications for both marketers and public policy makers. Efficiency and equity issues associated with current coupon industry practices, as well as issues arising from this research, are examined. Finally, recommendations for further research are discussed.

\* The authors would like to thank Professors Bruce Anderson and Gene German, Cornell University, for their helpful suggestions and Rod Hawkes, Extension Associate, for his editorial assistance. The content of the report, however, is the responsibility of the authors.

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## SECTION I:

## INTRODUCTION

The demographics of the United States population are changing. The shift toward an older population, the decline in the number of traditional households, the rapid increase in the number of childless couples, the growing number of single person households, the increased participation of women in the workforce, and the increased proportion of males as primary food shoppers are evidence of these changes.

NATURE OF THE PROBLEM

In 1980, only 13 percent of the 82 million U.S. households contained a working father, non-working mother and children. The remaining households were composed of dual career couples, single individuals, single parents, or non-family households (Ziethaml 1985).

As the population continues to diverge from what was once considered the traditional family, characteristics of the traditional food shopper have also changed. To most effectively meet the wants and demands of all contemporary shoppers, marketers and public policy makers need to develop an improved understanding of these new consumers: how they live, how they think, how they make their purchase decisions.

In today's food and grocery industries, coupons have become one of the fundamental means by which food industry firms attempt to communicate with consumers and influence their marketplace choices. These marketplace choices, or the demand for food products, are a function of many factors, including consumer income, tastes and preferences, demographics, advertising, and promotions. Manufacturers have found promotional tools such as coupons to be increasingly effective in influencing consumer purchases.

The use of coupons as a promotional technique for consumer non-durables has grown dramatically. Manufacturer coupon distribution has doubled in the last five years, from 102.4 billion coupons in 1981 ("Bringing Customer Focus to Coupon Redemption" 1986) to 202.6 billion in 1986 ("1987 Nielsen Review" 1987). An increase in the number of manufacturer coupons redeemed by consumers has paralleled the increase in coupon distribution. In 1981, consumers redeemed 4.13 billion coupons, while in 1986, 7.32 billion coupons were redeemed ("1987 Nielsen Review" 1987). This represents consumer "savings" in 1986 of \$2,750,000,000 from their total grocery bill.

## LITERATURE REVIEW AND OBJECTIVE

Despite the prevalent use of coupons as a promotional technique by manufacturers and the rapid increase in coupon use by consumers, consumer behaviors and attitudes towards coupons has been virtually an unresearched area (McLaughlin 1986). Firm level coupon studies (Newspaper Advertising Bureau, Inc. 1983; Campbell's Soup Company and People Magazine 1985) have tended to be limited in scope, and results have been based on the implementation of relatively elementary statistical procedures.

The more comprehensive and analytically based studies conducted (A.C. Nielsen 1985; Mooty 1983; Gallo, Hamm, and Zeller 1981; Schindler 1986; Shimp and Kavas 1984) attempt to probe consumer attitudes and coupon usage habits with respect to select demographic variables, as well as expose key public policy considerations associated with the coupon industry. However, past research does not examine the demographic factors influencing the degree of, or the motivations behind, coupon use. In addition, a thorough investigation of the attitudes, behaviors, and use of coupons displayed by distinct market segments is not included.

The purpose of this research was to elicit consumers' own perceptions of their attitudes and behaviors regarding grocery coupons and to segment consumers into groups based on resulting similarities and differences. These segments can subsequently be used by marketers and public policy makers to make more informed decisions.

Although marketers have been somewhat negligent in determining the characteristics and needs of various coupon using consumer segments, their attention has been riveted on the use of coupons as a promotional tool. And while the concept of the coupon (a certificate which can be redeemed at a store for a specific price reduction on the purchase of a particular brand) has not changed dramatically since C.W. Post created the coupon to introduce Grape Nuts cereal in 1896, the phrase "coupon industry" has taken on a new dimension. Its extraordinary growth has made it a multi-billion dollar business.

The section which follows briefly describes the history of couponing, provides an overview of the coupon industry from a structural perspective, and acclimates the reader to current trends and operating practices. Insights can be gleaned into public policy issues such as the following:

- Are the costs of coupon promotions greater than the benefits to consumers?,
- Are lower income zip code areas being deleted from direct mail mailing lists, and if so, what does this say about coupon access?,

- Are consumers who do not purchase newspapers at an unfair disadvantage in terms of coupon access?,
- Do coupons (distributed predominantly for non-healthy food and grocery items) encourage poor food consumption patterns?,
- What role does coupon misredemption play in increasing coupon costs?,
- Do coupons lead to indiscriminate grocery purchases without regard for price considerations?, and
- Will coupon computerization increase the equity of coupon programs or only make it worse?.

## SECTION II:

## STRUCTURE AND OPERATIONS OF THE GROCERY COUPON INDUSTRY

HISTORY OF COUPONING

With the advent of mass production after World War II, manufacturers had the capacity to reach millions of American households for the first time in history. As a result, sampling, trading stamps, contests, retailer games, and premium offers came into vogue.

Coupons remained in the shadow of these promotional techniques until the mid 1960's when A.C. Nielsen published the first annual figures on the number of coupons distributed by manufacturers and corresponding redemption rates. This new information enabled manufacturers to gauge the effectiveness of their promotional efforts. Simultaneously, growing skepticism regarding the credibility of the "popular" promotional tools, and a period of rapid inflation, caused coupons to come under the manufacturers' spotlight.

ROLE OF COUPONS IN PRODUCT PROMOTIONS

Manufacturers typically develop marketing objectives prior to defining a specific promotional plan. The marketing objectives establish a brand's overall direction, incorporate the firm's basic goals and budgetary constraints, and determine the role promotion is expected to play in the marketing mix. Strategies are subsequently devised to meet these promotion and marketing objectives. Sub-objectives are generally specified according to price, product, packaging, distribution, and promotional criteria.

Common promotion objectives may include:

- to gain trial among non-users of the brand or product category,
- to help introduce an improved product line or lineextension,
- to increase repeat purchases by current users,
- to expand product usage,
- to defend product share and usage against competitive threats,
- to reinforce current advertising positioning and image,
- to soften the impact of a price increase and reduce temporary sales lags,
- to gain "cross-item" trial within a given line of products,
- to synergistically enhance the results of another

- promotional device (i.e. coupons and recipes),
- to increase distribution in a given area or during a specific introduction or sales drive, and
- to increase retail trade support and cooperation.

There are six basic types of coupons available to manufacturers who are engaging in a coupon promotion: Direct Mail, Run-of-Press, Sunday Supplements, Free-standing Inserts, Magazine (both On-Page and Pop-up), and In/On Package (Figure 1). Each technique has its own strengths and weaknesses. The specific tool chosen as a promotional device depends upon the needs of the manufacturer in meeting marketing objectives and the ability of each technique to fulfill its needs.

In general, mail and media (i.e. newspaper or magazine delivered) coupons are considered effective tools to induce trial, defend market share, reinforce advertising, soften price increases, increase distribution and gain retail tie-ins (Bowman 1980). In and on-pack coupons are traditionally used as a complement to media and mail coupons to encourage repeat purchases and induce cross-item trial.

#### CUPON DISTRIBUTION TECHNIQUES: ADVANTAGES AND DISADVANTAGES FOR MARKETERS

The major advantages and disadvantages of the six broad coupon distribution methods are summarized in Table 1.

##### Direct Mail

Direct mail coupons are printed coupons delivered in an envelope to households by the U.S. Postal Service in either "solo" or "co-op" form. Solo mailings consist of coupons offered by a single manufacturer on one or more products. Co-op mailings consist of coupons from a number of different companies (each company pays a portion of the costs of the mailing list, the envelope, the postage and the implementation costs) collected in one envelope. R.H. Donnelley's Carol Wright Direct Mail Coupon Program is generally regarded as the forerunner in this category by food industry leaders.

Direct mail solo coupons are an expensive form of coupon promotion relative to other couponing options, costing \$90 to \$130 per 1000 coupons distributed (Bowman 1980). However, these costs may be cut to one tenth by utilizing co-op mailings in which several companies share administrative and delivery costs.

Chief among the advantages of direct mail coupons is high market targeting efficiency through purchased mailing lists. As a result of targeting, redemption rates tend to be high relative to other distribution instruments (6.4 percent) (Table 2). Some

industry critics have expressed concern, however, that low income households may suffer as a consequence of this selective targeting.

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Figure 1: COUPON CLASSIFICATIONS AND DESCRIPTIONS

Newspaper -- Manufacturer's coupons included in their Run of Press (ROP) newspaper advertisements.

Sunday Supplement -- Syndicated or independent magazine sections circulated with Sunday papers.

Free-standing Inserts -- Pre-printed sheets containing multiple coupons and advertising copy, generally printed on heavier stock, inserted in the Sunday paper.

Magazine On-Page -- Manufacturer's coupon printed on page as a part of the advertisement.

Magazine Pop-Up -- Tip-in coupon, generally of heavier stock bound into magazine separately. Normally facing an on-page advertisement.

Direct Mail -- A packet or envelope containing coupons sent by mail to individual consumer households, usually in a cooperative program.

In/On-pack -- Coupons inserted in or imprinted on product packages, redeemable on subsequent purchase of the same product or a different product (called a cross product).

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Source: Nielsen Researcher, No. 1, 1976.

A.C. Nielsen has developed rules of thumb for deriving financial liability and associated cash flow needs for various forms of coupon promotions (Table 3). These figures, which assume the initial coupon drop occurred in the preceding one to three months, allow the manufacturer to gauge how much money the coupon promotion will cost, and subsequently, allow management time to make necessary adjustments to promotion budgets. Direct mail coupons are redeemed at the third fastest rate of the distribution techniques observed.

The direct mail coupon also offers distributional flexibility. Coupons can be delivered to a specific target audience, or addressed to the "occupant" of the residence to reach the mass market for the introduction of a new product. The use of a solo mailing also allows the company to choose almost any coupon format, without conforming to size restrictions and standard format requirements imposed on the coupon by the carrier (i.e. the newspaper or magazine).

For years, coupons were only available in two sizes, the "dollar bill" size and the "IBM card" size. Today, as the basic look of coupons changes (e.g. self destruct coupons, "maxi" coupons), the size of the coupon is also changing. Currently, there are four predominant coupon sizes used by manufacturers: full dollar bill size, junior dollar bill size, insert size, IBM card size (Table 4).

Table 1: COUPON TYPES--ADVANTAGES AND DISADVANTAGES

<u>Technique</u>	<u>Advantages</u>	<u>Disadvantages</u>
1. Direct Mail	: selective market targeting : high redemption (6.4%) : flexible format : low misredemption	: expensive -- \$90 to \$130 per 1000 solo coupons
2. Run-of-Press	: relatively inexpensive \$8 per 1000--solo \$2 per 1000--co-op : best market coverage : selective market targeting : implemented quickly	: must meet newspaper standards : high misredemption : low redemption (2.2%)
3. Sunday Supplement	: \$6.50 per thousand distributed : can time coupon drop	: low redemption (1.5%) : standard formats and sizes : high misredemption
4. Freestanding Inserts	: high redemption (4.0%) : concentrated coverage : fast redemption : flexible formats	: costs -- \$3 to \$12 per 1000
5. Magazines	: large gross circulation : selective market targeting : flexible formats	: pass along readership : high duplication : redemption lags
6. In/On-pack	: encourage repeat use : add value to carrier : tie-in usage reminder : low misredemption : low cost : very high redemption (9.2%) : selective market targeting	: government regulations : severe time lags : do not reach new (non) users



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**Table 2: AVERAGE REDEMPTION RATES BY MEDIA**

		<u>Percent</u>
Direct Mail:		6.4
Daily Newspaper:	ROP Solo	2.2
	Co-op (all)	2.3
Sunday Supplement:		1.5
Freestanding Inserts:		4.0
Magazine:	On-Page	1.7
	Pop-Up	4.0
In/On-pack:	Same-Brand In	14.3
	Same-Brand On	11.9
	Cross-Brand In	5.5
	Cross-Brand On	5.0

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Source: "1987 Nielsen Review" 1987.

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**Table 3: COUPON REDEMPTION TIMING PATTERNS**  
 Percent of Total Redeemed:

<u>Technique</u>	<u>Months After First Redemption</u>			
	<u>1</u>	<u>3</u>	<u>6</u>	<u>12</u>
1. Direct Mail	9%	43%	72%	92%
2. Run-of-Press	13%	49%	78%	94%
3. Sunday Supplement	9%	35%	66%	87%
4. Freestanding Inserts	10%	42%	73%	93%
5. Magazines:				
On-Page	7%	33%	61%	84%
Pop-Up	5%	31%	59%	84%
6. In/On-pack	2%	16%	44%	76%

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Source: Manufacturers Coupon Control Center (MC3), "Coupon Distribution and Redemption Patterns", 1986.

Table 4: PREDOMINANT COUPON SIZES

<u>Description:</u>	<u>Dimensions</u> <u>-inches-</u>
Full dollar bill size	2 5/8 by 6 1/8
Junior dollar bill size	2 5/8 by 5 3/4
Insert size	2 1/4 by 3 1/4
IBM card size	2 3/8 by 3 1/4

Source: Bowman 1980.

### Run-of-Press

"Run-of-Press" (ROP) coupons are contained within black and white ads in the "best food day" newspaper (usually a Wednesday or Thursday paper). Once again, a company can select either a "solo" format, or participate in a "co-op" advertisement which integrates a group of manufacturers' coupons into a cohesive whole through a common theme or graphic device.

A solo ad generally occupies 600 to 1000 lines of text, which leaves ample room for the coupon, product advertising copy, and an overlay. For a 1000 line black and white ad, the cost in 1980 was typically \$8 for each 1000 coupons distributed (Bowman 1980).

A manufacturer participating in a co-op ROP plan typically has only 500 to 600 text lines in which to place the coupon and advertising copy. Due to the nature of co-op ads, the coupons and copy from a number of different manufacturers are artistically arranged to form a single advertising spread. The cost to a manufacturer participating in a national co-op ad program in 1980 was between \$1 and \$2 for each 1000 coupons distributed (Bowman 1980). The exact cost depends on the size of the ad, the newspaper the ad is carried in, and the size of the run.

ROP ads offer the best coverage of any of the promotional options. There are approximately 1760 daily papers reaching 62 million households each day, and 7000 weekly papers reaching 40 million households each week (Bowman 1980). Reaching both the mass market and a target market are possible with ROP coupon promotions. The availability of both local and national newspapers gives the manufacturer the opportunity to select market coverage. Some public policy makers are concerned however, that certain low income or illiterate consumers may not have access to these print delivered coupons.

Newspaper ROP coupon promotions also allow the manufacturer

to pinpoint the timing of promotional releases and quickly implement a promotion with little "down" time. It is possible for a manufacturer to decide on a coupon promotion, and have the ROP coupon ad in newspapers across the country the following week. The financial liability of the promotion is also quickly gauged -- ROP coupons are the fastest redeeming medium (Table 3).

When a manufacturer buys newspaper ROP advertising space for couponing, a number of decisions must be made. A solo ad offers the manufacturer flexibility in terms of the size of ad to run (up to a full page), how much advertising copy to include, whether to use an overlay (e.g. a sweepstakes offer), and whether to use color in the coupon presentation. The manufacturer has an incentive to try to obtain advertising space on the border of the right hand page of the newspaper layout for maximum visual impact.

A manufacturer participating in a co-op plan loses some of this flexibility in order to gain efficiency. There is one standard coupon size and only one size for the individual manufacturer's total advertising spread (including the advertising copy, overlay, and the coupon itself). However, many manufacturers feel that differences in price and redemption rates between solo and co-op advertising compensate for the loss in flexibility, particularly for a product that is well established in the market.

A major drawback of ROP couponing is low redemption rates. For a typical solo, one brand, ROP coupon ad, the redemption rate is only 2.2 percent. The redemption rate is slightly higher for co-op ads (2.3%). Misredemption also tends to be a problem with newspaper coupons relative to other couponing techniques. They are readily available to the public in large quantities, and therefore, it is easier for malredeemers to clip and launder coupons in bulk.

### Sunday Supplements

Sunday supplements are color print mini-magazines distributed in most Sunday newspapers. All Sunday supplements are printed and cut to a uniform size for ease of handling.

Three major syndicates are involved in producing Sunday supplements for newspapers: Parade Magazine, Sunday Metro, and Family Weekly. In 1980, Parade Magazine distributed to 129 newspapers for a total circulation of 21 million. Sunday Metro is a locally edited supplement that coordinates advertising through a national service. It was distributed in 49 newspapers to reach 21 million households in 1980. Family Weekly was distributed to 329 newspapers for a total circulation of 12.2 million households (Bowman 1980). In order to maximize their market coverage (i.e. reach 21 to 30 million households),

manufacturers can promote their product through two or more of the syndicates and include some key independent newspapers in their coupon drop (Bowman 1980).

There are two basic formats for Sunday supplements: "on-page" coupons and "tip-on" coupons. The on-page coupons are found in any standard size ad unit. They are similar in format to ROP ads, except they are printed in color and found in a special supplement. Tip-on coupons are generally used only in conjunction with full page ads. They involve a separate pre-printed coupon card that is affixed to the advertisement at the newspaper printing plant.

The cost of this couponing method varies. In 1980, a manufacturer utilizing one of the larger network supplements and taking advantage of a package deal could expect to pay \$6.50 for each 1000 coupons "dropped". The use of an independent newspaper is less efficient, costing between \$9 and \$11 per thousand (Bowman 1980).

Redemption rates are relatively low for Sunday supplements. These coupons redeem at an average rate of 1.5 percent. Sunday supplements are the fourth fastest redeeming medium (Table 3). This method is however, the slowest of the newspaper media in terms of coupon turn-around time. As Bowman (1980) writes, "With fairly high costs for a complete circulation pattern and a low average redemption rate, it is hard to view supplements as an efficient technique."

### Free-standing Inserts

Free-standing inserts (FSIs) , known also as "flagwavers", are found in Sunday and "best food day" newspapers on special paper stock. A solo FSI can be distributed in almost any paper in the country. However, mechanical stuffing equipment on the newspaper publisher's premises is required. Once again, solo free-standing inserts are not as efficient as co-op plans. Therefore, their use by manufacturers has been limited. While there are few major co-op insert companies that coordinate and distribute inserts, these firms are capable of distribution to over 100 newspapers. In 1980, the number of households reached by these papers was between 28 and 33 million. Since the total practical circulation for all newspapers is between 40 and 45 million, these 100 papers have the capacity to reach approximately 60 percent of the total U.S. newspaper market (Bowman 1980).

There are a number of benefits to using FSIs for coupon distribution. Coupons found in FSIs redeem at 4.0 percent, a higher rate than any other coupon media. This rate can be as high as 6.6 percent depending on the brand name of the product, the face value of the coupon, the product category involved, and

the placement of the coupon in relation to advertising copy. They are a quickly redeemed medium, second only to newspaper ROP advertisements (Table 3), and offer the advantage of high local coverage.

FSIs offer room for flexibility, even when a co-op format is selected. Microfragrance (a scratch and sniff option), sequential numbering for a sweepstakes offer, wash off spots for reader involvement, and paste on stamps are examples of "extras" a manufacturer might select. If a manufacturer chooses a solo advertisement, coupon size, ad size, and advertising print are at the manufacturers discretion.

The major drawback of FSIs is expense (\$3 to \$12 per 1000 in 1980). The costs of printing and delivering FSIs are high due to the base media costs, the expense of handling a single sheet of paper, and the expenses of printing. Note that because redemption of coupons in high ad units does not increase proportionately to the size of the ad, smaller ad units are viewed as more efficient (Bowman 1980).

#### Consumer Magazines

There are two basic formats for coupons found in magazines: on-page coupons, and tip-on (or pop-up) coupons. On-page coupons are coupons found in magazines in any size ad unit. Tip-in or pop-up coupons involve a separately printed card which is bound into the magazine.

A manufacturer advertising through several consumer magazines (women's magazines and family oriented literature) for the coupon drop, will obtain a very large gross circulation, but at the expense of high duplication rates. In order to maximize the effectiveness of magazine distributed coupons, different ads and ad types are generally employed to appeal to a wider population, rather than a single specific audience. Note that some industry critics have, once again, expressed concern that low income or illiterate consumers may not have access to these coupons.

The cost of placing coupons in magazines varies, depending on the magazine selected for carrying the ad, the size of the ad, the format of the ad, the product category being promoted, and the face value of the coupon.

The redemption rates for magazines also vary by format. On-page coupons have an average redemption rate of 2.0 percent, while tip-on coupons redeem at 4.3 percent. However, pass-along readership and magazine duplication make it hard to ascertain how many of the coupons are redeemed by the same households. In addition, significant time lags in coupon redemption caused by prolonged magazine shelf life create difficulties in gauging

financial liabilities. Only 32 percent of the coupons redeemed are submitted within three months of the coupon drop, and the drop itself can span three months time or more. The initial drop begins the first day a magazine is for sale, but it does not end until the magazine is discarded by the final recipient.

Magazine coupons offer manufacturers a great deal of flexibility. Checkerboard layouts, sequential right hand half page ads and removable recipe books are examples of innovative extras manufacturers have utilized in the past to boost readership and coupon redemption rates.

Although the use of magazines may not be the most efficient medium for coupon distribution, it may be the preferred promotional technique if total coupon redemption is a secondary promotional objective. Magazines may be important components of the brands' advertising media mix, and coupon redemptions from a targeted audience may be of primary concern. In these cases, magazines may be the most effective couponing tool.

#### In and On-Package Coupons

As the names indicate, these coupons are found either inside a package in a sterile cellophane wrapper, or on the outside of the product package. There is great diversity in how these coupons are used by manufacturers, but four basic categories are prevalent.

Same-brand coupons are coupons good for redemption on the next purchase of the same product. They are either packed in or printed on the package, and attempt to encourage repeat use of the product. Cross-ruff coupons are redeemable on a different product, or perhaps a different brand in the same product category (e.g. a coupon for Cool Whip might be packaged in or on a pumpkin pie container). Cross-ruff coupons are also used in an attempt to gain market share if two couponed brands in the same product category compete. The distribution of Coke coupons to Pepsi users is one example of this technique. A third form of in and on-package coupons is the multi-coupon offer. This is a high value pack of coupons from several sources attached to a carrier brand. Finally, the instant removable coupon is located outside the package with perforated edges for easy removal at the store for instant savings.

Each of these types of in and on-package coupons has particular marketing strengths. As stated previously, same-brand coupons good on the next purchase of the product stimulate repeat purchases. Cross-ruff coupons add value to the carrier brand and act as a tie-in usage reminder (i.e. Cool Whip and pumpkin pie). Multi-coupon packs add value to the carrier product because they attract the consumer's attention. Immediately redeemable coupons act as a substitute for a cents-off promotion.

Because of vast differences in these in and on-package coupon techniques, no cost figures are readily available. However, due to the lack of middlemen in the coupon distribution process (i.e. publishers of newspapers, magazines and mailing lists are not involved in the in and on-package coupon distribution process), it is assumed that this distribution method is a low cost technique. The financial liability of a manufacturer using this coupon technique is difficult to determine due to severe time lags associated with shipping, warehousing and stocking the product, even before it is sold and consumed. This medium is by far the slowest redeeming (Table 3), therefore, these coupons often do not carry an expiration date.

Same-brand coupons produce the highest redemption rate of the four in and on-package techniques discussed, at an average rate of 13.8 percent, because 100 percent are received by the current users. In-package coupons redeem at higher rates than on-package coupons (an average of 10.3 percent versus 8.1 percent) because consumers' clipping effort is minimized. Cross-ruff coupons benefit the carrier product since the coupon is regarded as additional value. As well, the couponed brand can be effectively targeted to reach the audience of the carrier brand.

Because of the nature of in and on-package coupons, a few guidelines are generally followed by manufacturers in the formulation of the coupon. Most in and on-pack coupons do not contain an expiration date because of the severe time lags associated with product movement and shelf life. In addition, the Food and Drug Administration (FDA) has strict regulations concerning the packaging of coupons with food, so all in-pack coupons must be printed on FDA approved paper using FDA approved inks (NCH Reporter, No.1, 1982).

### Other Couponing Techniques

Non-traditional couponing techniques have grown in importance in the last decade. The inclusion of coupons in the Comics section of the Sunday newspaper for products which appeal to children has become popular. The strategy here is that children, through their emotional appeals, influence parents to purchase these products. Some critics argue that manufacturers may be overzealous in their attempts to reach their target audience and are subsequently exploiting children through such promotions.

Sending company representatives to grocery stores to hand out coupons has also become a popular promotional tool. This technique is particularly effective when a coupon is used in conjunction with product sampling. However, distributing coupons in a store is not without difficulties. Legal constraints on in-store solicitation and sporadic customer traffic through the store are examples. These difficulties can be overcome by

locating the representative outside the store. This strategy allows the manufacturer to select a location to target the coupon audience without violating store policy.

A third alternative among the non-standard coupon distribution methods is dispensing coupons on the back of check-out tapes. However, the abundance of half coupons associated with the tape ending halfway through a coupon is a problem.

Radio coupons have also gained attention in the last few years. Commercials over the radio suggest that consumers "create" their own coupon to be redeemed at participating businesses. McDonald's initiated this technique in 1978 in Washington, D.C. (Bowman 1980).

#### TRENDS IN COUPON DISTRIBUTION

In the last decade, total coupon distribution has increased dramatically, from 45.8 billion in 1976 to 202.6 billion coupons in 1986 (Table 5). This represents a 342 percent increase in a ten year period. Since 1964, the average annual rate of growth has been 16 percent

Table 5: TOTAL COUPON DISTRIBUTIONS, 1964 TO 1986

<u>Year:</u>	<u>Distribution:</u> (billions)	<u>Percent</u> <u>Increase:</u>
1986	202.6	12.7
1985	179.8	10.2
1984	163.2	14.2
1983	142.9	19.6
1982	119.5	16.7
1981	102.4	13.0
1980	90.6	11.6
1979	81.2	11.7
1978	72.7	16.9
1977	62.2	35.8
1976	45.8	28.3
1975	35.7	19.8
1974	29.8	8.0
1973	27.6	17.9
1972	23.4	15.3
1971	20.3	23.8
1970	16.4	64.0
1964	10.0	n/a
Average compound rate of growth 16%		

Source: MC3, "Coupon Distribution and Redemption Patterns", 1986.



As the coupon industry has grown, the media mix used by manufacturers to distribute coupons has shifted (Table 6). In the late 1970's, newspapers were the predominant promotional vehicle for coupon distribution. Newspaper solo and co-op coupons together comprised 52.3 percent of the total number of coupons distributed in 1979. By 1986, the use of newspaper coupons had dropped dramatically, representing only 14.5 percent of the total coupon drop, while the Sunday and daily FSI medium grew to 68 percent of the coupon drop.

Manufacturers suggest that these media mix adjustments reflect their growing understanding of consumer behavior, more sophisticated and innovative marketing, better forecasting of redemption rates, and changing economic conditions.

#### REASONS FOR COUPON GROWTH

Five key reasons have been cited to explain why total coupon distribution has grown so sharply (MC3, A Chronology of Couponing, 1987):

- the clearinghouse concept
- co-op advertising
- adjustments to the trade mix
- increased competition
- economic factors and marketing policy

#### Coupon Clearinghouse: The Flow of the Coupon

The flow of any coupon through the clearinghouse system begins after a firm has set its promotional objectives and selected a distribution medium through which the coupon is delivered to the consumer. Upon receipt of the coupon, the consumer must, if desiring to redeem the coupon, cash it in at a retail outlet. The retailer, in turn, gives the customer the cash equivalent of the face value of the redeemed coupon and retains the coupon (Figure 2).

In accordance with manufacturer and retailer policies, the coupons from any given store are compiled and forwarded to the retailer's headquarters, and then sent to a coupon clearinghouse (Table 7). The clearinghouse separates coupons by manufacturer, brand, and face value, and accepts financial responsibility for the coupons. (The coupon separation and tabulation process usually occurs in Mexico or the Caribbean, where "cheap" labor is available.) After processing, the clearinghouse provides the retailer with a complete accounting of the coupons submitted and their total face value by manufacturer.

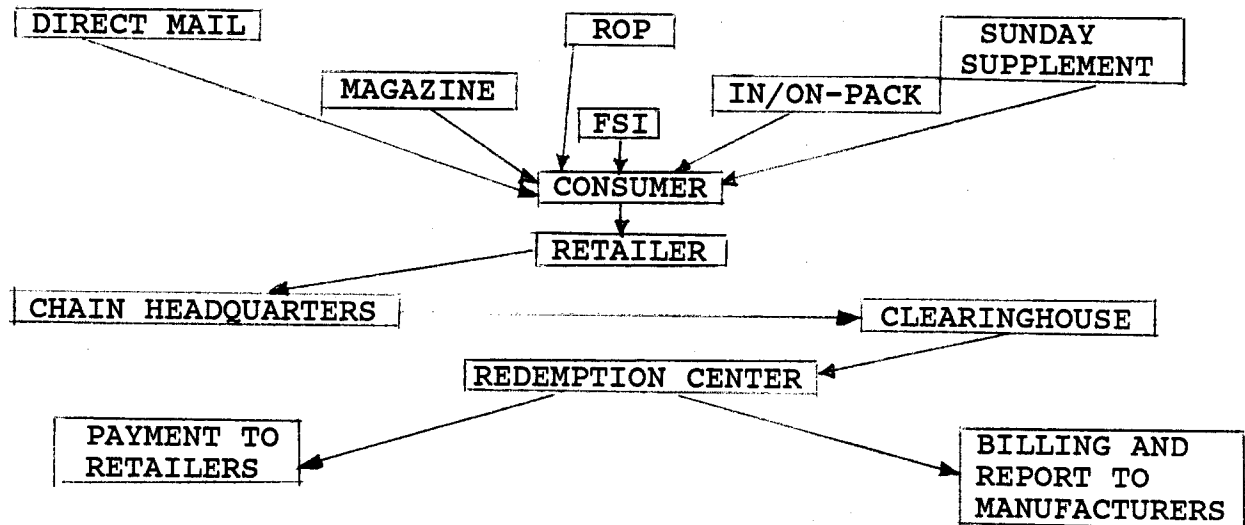
Table 6: SHARE OF COUPON DISTRIBUTIONS BY MEDIA

Media:	Years			
	1986:	1985:	1984:	1983:
Newspaper:				
Solo Format	7.4%	12.2%	17.3%	20.0%
Co-op Format	7.1%	8.0%	10.0%	12.2%
Freestanding Inserts	68.0%	59.9%	51.5%	43.0%
Sunday Supplements	1.2%	2.1%	3.3%	4.9%
Magazines	6.5%	8.6%	8.5%	10.0%
Direct Mail	4.0%	4.4%	4.4%	4.3%
In/On-pack	5.8%	4.8%	5.0%	5.6%
Media:	Years			
	1982:	1981:	1980:	1979:
Newspaper:				
Solo Format	23.1%	27.3%	31.3%	36.2%
Co-op Format	15.2%	17.7%	17.1%	16.1%
Freestanding Inserts	33.3%	26.2%	18.4%	14.9%
Sunday Supplements	6.3%	7.3%	9.0%	9.5%
Magazines	11.4%	11.8%	13.3%	12.2%
Direct Mail	3.8%	3.3%	3.4%	3.2%
In/On-pack	6.9%	6.4%	7.7%	7.9%

Source: MC3, Coupon Distribution and Redemption Patterns, 1986.

Traditionally, the clearinghouse pays the retailer the full face value of each coupon plus a manufacturer's coupon handling bonus minus the clearinghouse processing expenses. In 1987, manufacturers paid retailers 8 cents for each coupon handled, and most coupon clearinghouses charged retailers 3 cents/coupon for coupon processing.

Figure 2: TYPICAL COUPON DISTRIBUTION CHANNELS



Source: Bowman 1980.

Simultaneously, the clearinghouse sends an invoice to the manufacturer for the total face value of all coupons, plus 8 cents for each coupon handled. In addition, the manufacturer receives all of the actual coupons in the event that the firm wants to re-process the coupons through its own internal clearinghouse. Typically, there are significant lags between the time the clearinghouse pays the retailer and the time the manufacturer pays the clearinghouse. During this period, the clearinghouse assumes all of the risk associated with coupon fraud (the manufacturer pays the clearinghouse only for those coupons which have been properly redeemed) and all financial liabilities. Thus, large bases of liquidity must be maintained by the clearinghouse.

Table 7: MARKET SHARES OF COUPON CLEARINGHOUSES

<u>Company</u>	<u>Market Share</u>
A.C. Nielsen	35%
Coupon Redemption, Inc.	20%
Carolina Clearing	15%
Coupon Clearinghouse Services	10%
Trade and Grocer Associations	10%
Coupon Control, Inc.	5%
Others	5%

Source: Coupon Control, Inc., 1987.

A recent proliferation of commercial coupon clearinghouses has made the total coupon redemption process less costly for

manufacturers. This has helped spur increases in total coupon distribution. The manufacturer is more assured of prompt payment to the retailer, and there is less fear of overloading market channels. Over 90 percent of all coupons redeemed flow through commercial clearinghouses.

One clearinghouse firm, Coupon Control, Inc., has diverged from traditional industry practice and introduced an alternative solution to the problem of cash flow lags and large capital requirements. After the coupon separation and tabulation process is complete, the clearinghouse sends an accounting of the coupon redemptions to both the retailer and manufacturer. However, it is the retailer that assumes the responsibility for all financial liabilities and acquisition of payment from the manufacturer. The retailer collects payment from the manufacturer by deducting the total value of coupon redemptions and handling fees from the corresponding manufacturer's product invoices. For example, if a grocery chain owes a manufacturer \$150,000 for health and beauty aids inventories, but the manufacturer in turn owes the retailer \$40,000 for coupon redemptions plus handling, the chain would make a payment to the manufacturer for the net amount of \$110,000.

While this method does appear to reduce clearinghouse capital requirements and allows the clearinghouse more direct control over finances, manufacturers have been reluctant to support such clearinghouse concepts. An incentive exists to avoid payment for as long as possible. While the manufacturer waits for the clearinghouse to tabulate the credits and debits, mail the appropriate invoices, and send the follow-up requests for payment, the money owed the clearinghouse earns interest. As this novel concept evolves, it may become more widely accepted.

### Cooperative Advertising

The development of cooperative advertising has been cited as the most important reason for increased coupon distribution in the last decade (MC3, "A Chronology of Couponing", 1987). Co-op advertising allows circulation costs to be shared among a number of promoters, contributes to improved demographic targeting, and allows the coupon to be presented to the consumer as part of a unified theme.

### Adjustments to the Trade Mix

Manufacturers also turned to coupons after the government imposed restrictions on the advertisement of certain product groups and the use of certain promotional techniques. For example, after Federal rulings limited the advertising of tobacco, tobacco manufacturers switched to coupons to promote

their products.

### Increased Competition

In 1986, over 2000 companies used coupons as an integral part of their promotional activities, up from approximately 1000 in 1975 (MC3 Reporter, No. 1, 1986). This growth occurred for a number of reasons. In order to keep pace with the changing demands of consumers for price reductions and to maintain market share, manufacturers have been forced to adopt competitive promotional strategies. The cost effectiveness, flexibility, and convenience offered by the coupon have made it a favored promotional tool.

Product proliferation and the emergence of the mass merchandiser have also contributed to the growth of coupons. Coupons not only provide the consumer with a price incentive to purchase a product, they create product awareness, and act to disseminate information in the introduction of a new product. These latter two reasons are perhaps the most critical in an era of ever greater product proliferation and the resulting consumer confusion. Consumer and retailer acceptance has encouraged the further use of coupons.

Finally, as inflation continued in the early 1980's, both manufacturers and retailers sought ways to cushion price increases. Coupons provided a way to soften the impact of price increases by passing savings along to some consumers. In addition, coupons created increased consumer interest and retailer awareness, reinforced brand loyalty, and helped manufacturers remain on par with their competitors.

### DISTRIBUTION BY PRODUCT GROUP

Although overall coupon distribution has increased dramatically, certain product groups are more heavily couponed than others. The products shown in Table 8 were the ten most heavily couponed by manufacturers in 1986, and are ranked in order of distribution by marketing medium. The medium selected reflects manufacturers' selective market targeting and cost considerations.

Table 8: RANK OF COUPON DISTRIBUTIONS BY PRODUCT GROUP

Rank Overall:	Rank by Distribution Technique		
	Newspaper	Magazine	Mail
1. Dog Food	1	1	4
2. Candy	5	2	14
3. Coffee	3	7	2
4. Margarine	6	3	8
5. Cat Food	2	--	--
6. Frozen Entrees	4	10	--
7. Cold Remedies	10	8	--
8. Carbonated Beverages	9	11	20
9. Analgesics	7	20	9
10. Bar Soap	14	15	3

Source: Majers Corporation 1987.

#### COUPON VALUES

Coupon face values have changed over time (Table 9). Average face values of a single coupon grew from 17.1 cents in 1979 to 29.8 cents in 1986, while the most prevalent coupon value grew from 10 cents in 1979 to 25 cents in 1986.

Table 9: FACE VALUES OF GROCERY PRODUCT COUPONS, 1979-1986  
(% of distribution)

Face Value	Years							
	1986	1985	1984	1983	1982	1981	1980	1979
\$ .10	n/a	5.1	6.5	9.1	13.4	22.8	31.5	34.4
\$ .12	2.7	1.0	2.1	2.7	3.9	4.8	4.0	4.5
\$ .15	14.3	20.7	20.9	24.1	29.6	27.3	24.4	23.5
\$ .20	19.5	20.9	20.6	18.3	15.9	13.1	12.5	12.1
\$ .25	27.8	24.1	25.2	25.4	21.0	18.1	14.2	12.2
\$ .30 to \$ .45	21.0	16.2	14.6	11.4	9.0	7.6	6.4	8.1
\$ .50 +	14.7	12.0	10.1	9.0	6.7	5.0	3.9	n/a
Mean Value (\$)	.298	.273	.262	.241	.217	.198	.185	.171

Source: NCH Reporter, 1979 to 1987.

Different grocery products are associated with coupons of different face values, with highest valued coupons associated with beverages, frozen foods, household products, and health and beauty aids (NCH Reporter, No. 2, 1981). Face values of these coupons ranged from \$.208 to \$.223 in 1980, while the overall

face value for all couponed products averaged \$.185. However, other packaged foods and meat and dairy products carried average face values of only \$.155 and \$.171 respectively in the same year. Note that coupons for non-food items and highly processed foods have the highest value. Although some argue that coupon face values are higher for these items because they are traditionally more expensive to purchase, others believe that manufacturers issue higher value coupons in an attempt to influence consumers to purchase non-nutritional items. The latter argument however, seems to be peripherally supported by these figures.

### COUPON REDEMPTION

Coupon redemptions have nearly kept pace with coupon distributions, growing at an average annual rate of 11 percent in the last 15 years. A 92 percent increase in redemptions was seen between 1980 and 1986 (MC3 "A Chronology of Couponing" 1986). In 1986, 7.32 billion coupons were redeemed by consumers for a total reduction of \$2.75 billion from consumers' grocery bills. In 1980, these figures were 3.81 billion and \$.78 billion respectively (Table 10). Note that the consumer savings associated with coupon use increased by 252 percent, while inflation rose by only 39.6 percent for food items during the same period (Consumer Price Index, 1987). The net effect on consumers has been an increase in real savings over this time frame.

Table 10: COUPON REDEMPTIONS AND CONSUMER SAVINGS, 1980 to 1986

<u>Year</u>	<u>Redemptions</u> <u>-billions-</u>	<u>Savings</u> <u>-billions-</u>	<u>Redemption Rate</u> <u>-percent-</u>
1986	7.32	\$2.75	3.6
1985	6.49	\$2.24	3.6
1984	6.25	\$2.06	3.8
1983	5.56	\$1.69	3.9
1982	4.48	\$1.20	3.7
1981	4.13	\$1.01	4.0
1980	3.81	\$ .78	4.2

Source: MC3, "A Chronology of Couponing", 1986.

## REASONS FOR REDEMPTION GROWTH

Research by A.C. Nielsen Company indicates 7 key reasons for increases in coupon redemptions:

- more households using coupons
- expanding media coverage
- increasing retailer involvement
- "high turn" products
- rising face values
- advertising innovations
- economic factors

### More Households Using Coupons

In the last decade, the number of households using coupons has significantly increased. In 1971, 58 percent of all households used coupons, while in 1984, this number had increased to 79 percent. In addition, this redemption growth has been evident across all demographic groups of consumers, not simply an amplified use by a single segment of consumers (Nation's Restaurant News 11/3/80; Nielsen, "The Consumer Speaks Out", 1980).

### Expanding Media Coverage

Expanding media coverage has also contributed to increased coupon redemptions by creating an enhanced image of the coupon in the consumer's eyes. Coupons are no longer found in just a few select magazines or in the Sunday paper.

### Increasing Retailer Involvement

Nielsen also cites increased retailer involvement as pivotal to increased coupon redemptions. Retailers have recognized the ability of coupons to attract customers to their stores and are making coupons a competitive tool. Many chains offer double or even triple the face value of coupons to redeeming customers.

While this may be a productive competitive strategy in the short run, it is not without problems. Progressive Grocer has described the practice of double couponing as a "competitive treadmill" (Sansola 1985). The retailer pays the consumer the multiple amount and is reimbursed for just the face value plus the handling fee by the manufacturer. For example, if a retailer offers double coupons and gives a customer \$1.00 for a 50 cent coupon, the retailer will receive 58 cents from the manufacturer, and have a 42 cent debit which will have to be made up through increased sales volume. Because the grocery industry operates on low margins -- firms earned about 1 cent profit for each dollar of sales in 1985-1986 (McLaughlin and Hawkes 1986) -- it will take additional sales of approximately \$42 for the store to break



even. So, while double and triple coupons may enhance a store's competitive position and benefit consumers in the short run, they are a costly proposition for the retailer.

### Rising Face Values

Rising coupon face values have also contributed to increased coupon redemptions. Coupon values increased by 60 percent between 1979 and 1985 (Table 9). As a result, consumers have become more aware of the larger potential savings associated with coupon redemption.

### "High Turn" Products

Manufacturers have also increased coupon distributions for "high turn" products, products which sell more quickly than others. Consumers redeem coupons for these products at double and triple the average redemption rate (MC3, "A Chronology of Couponing", 1986).

### Advertising Innovations

Coupon advertising has also become much more innovative in the last decade. Self destruct coupons, color in ads, and overlay use exemplify these advances. Increasingly, manufacturers have created coupons that promote consumer awareness and involvement in the couponing process, and lead the consumer to feel like a "smart shopper" (Schindler 1986).

### Economics Factors

When inflation soared in the early 1980's, consumers started looking more aggressively for ways to reduce the impact of price increases. Many turned to coupons, and using coupons became institutionalized as a way of life for many households.

### COUPON MISREDEMPTION AND MALREDEMPTION

While manufacturers are interested in boosting coupon redemption rates, they are also concerned about coupon misredemption. A misredemption occurs when a customer, either intentionally or unintentionally, turns in a coupon at the grocery checkout for products not purchased or uses expired coupons for products purchased.

The problem of coupon misredemption is growing. In 1986, "Consumer misredemption accounted for 33 percent of all coupons redeemed" ("Supermarket News" 2/27/87). In 1984, Nielsen estimated that these misredemptions represented losses of \$560 million (MC3 Reporter, No.1, 1986). According to Rudi Pizzano, a managing consultant for Management Decision Systems, "Retailers

don't have time to carefully check every coupon, and they are reluctant to confront customers who misredeem for fear of offending those who did so accidentally." ("Supermarket News" 2/27/87).

A second form of coupon misredemption, malredemption, is the intentional misuse of coupon offers by retailers, who obtain coupons from sources other than consumers. These coupon sources receive some predetermined amount of cash from retailers, who then include these coupons in the regular shipments to the coupon clearinghouse. "Gang cuttings", a process in which stacks of advertising pieces are trimmed by paper cutters and then washed to achieve a worn appearance, have also become prevalent (Bowman 1980).

### COUPON SCANNING

The increased use of electronic scanners in grocery checkouts is providing an efficient means to uncover coupon misredemption. Scanners allow coupons to be verified against purchases. Two types of scanners are currently employed in identifying coupons. These are the Universal Products Code (UPC), a bar code which is compatible with most scanning systems, and the Optical Character Recognitions code (OCR), a code composed of a string of numbers corresponding to the individual product. As stores become more computerized, the need for uniform coupon coding will become vital (NCH Reporter, No.1, 1979).

However, many retailers are still wary of coupon scanning ("Promotions" 1/26/87). Although the benefits of scanning coupons are well documented -- data availability, tracking of coupon redemption, and coupon validation -- retailers have been reluctant to adopt this technology. As Duane Wakefield, manager of point-of-sale systems at Hannaford Brothers states, "We are not sure that there is any real benefit for us, the retailer, in scanning (coupons). We don't know that the cost of updating our systems to implement the application would be a good investment. We see most of the benefits going to the manufacturers."

### COUPONS GO ELECTRONIC

Evidence of the impending changes in the coupon industry are widespread. One such development is the electronic coupon dispenser for coupon distribution at the point-of-sale.

#### "Coupon Solution"

Catalina Marketing Corporation (Los Angeles, CA) has developed the "Coupon Solution", an electronic coupon dispenser,

which has the capacity to both print and scan store coupons ("Promotions" 1/26/87). George Off, president of Catalina Marketing explains, "When a customer buys an item, the software system determines whether or not it is a 'trigger' item. If it is, a printer attached to the scanner prints a store coupon that can be used on a future shopping trip, either for the same item, a related item, or a competing item. The system also has the capability of scanning any manufacturer coupon."

In addition to enabling stores to distribute their own coupons, this system may also speed up the redemption process and eliminate a majority of store coupon misredemptions.

### "Coupon Connection"

Promovision recently designed an automated coupon machine called the "Coupon Connection" (Beta Research 1985). This machine allows consumers to select the coupons desired from the field of coupons available, and then each coupon selected is individually printed upon request.

The coupons available to the customer change periodically in order to sustain customer interest and attention, and are listed on an overhead display for high visibility throughout the store. Typically, the coupons dispensed are lower in face value and have a shorter expiration period than those distributed through other media.

### "Datachecker"

AT&T introduced an automated teller machine in May, 1987 which is hooked up directly to a scanner at the grocery checkout. As the customer enters the store, AT&T's "Datachecker" displays a menu of the coupons available. In order to activate the system, a personalized card with a magnetic strip (e.g. Mastercard, Visa, AT&T calling card) is inserted into the machine. The full menu of coupons available appears, and the customer selects those coupons desired. When the customer has completed the selection process, the machine prints out a listing of those coupons chosen, and the total savings possible if all coupons selected are redeemed. The customer then removes the magnetized card from the machine and continues shopping.

When the customer is ready for check out, the magnetized card is given to the clerk. As each grocery item is scanned, the computer (attached to the scanner) keeps track of whether a coupon was selected for that product. If the person did select a coupon, the price of that item is automatically reduced by the face value of the coupon selected. Thus, coupon misredemption is eliminated, and it is possible to track not only coupon use, but track it by customer.

Although the merits of electronic coupon dispensers seem indisputable, public policy makers are concerned. Dispensers requiring a magnetized card (such as a Mastercard, Visa, or AT&T card) to activate may be prohibitive to low income consumers. These households are unlikely to meet the eligibility requirements necessary to obtain a credit card of this nature.

The coupon industry has experienced extraordinary growth. Vehicles for coupon distribution are becoming more innovative, coupon formats and sizes are becoming more numerous, coupon redemption is flourishing, distribution rates are increasing, consumer savings are growing, and the clearinghouse concept has expanded.

## SECTION III

### RESEARCH METHODOLOGY

#### SELECTION OF A MAIL QUESTIONNAIRE

A comparison of several survey methods (face to face interviews, telephone surveys, hand delivered surveys, and mail surveys) was made in order to determine the most appropriate for the needs of this study. In addition, the reliability of each technique was examined.

Although face to face contact has traditionally secured higher response rates than other methods, development of comprehensive and integrated plans (such as Don Dillman's Total Design Method) for raising response rates associated with mail survey techniques and "social disintegration of the U.S. citizenry" have made mail questionnaires relatively more effective (Goyder 1985).

Donald Dillman, author of The Total Design Method, provides further insights into the relative advantages and disadvantages of the three major survey techniques --face to face interviews, telephone surveys, and mail questionnaires. His comparison criteria fall into four broad categories: ability to obtain a representative sample, constraints on questionnaire construction and question design, ability to glean accurate answers from the sample, and the administrative requirements for implementation and completion (Dillman 1978).

Within these four broad categories, each survey technique displays strengths and weaknesses (Table 11). Given the relative merits of each survey technique and the constraints of the study in terms of labor and monetary resources, a mail questionnaire was the survey method selected to examine consumer attitudes towards coupons.

#### CONSTRUCTING THE QUESTIONNAIRE: THE TOTAL DESIGN METHOD

The Total Design Method (TDM) was utilized as a framework for the development of the mail questionnaire (Dillman 1978). Dillman has examined numerous survey methodology studies, and has devised a new methodology which consistently produces response rates of 60 to 70 percent for mail questionnaires.

The thrust of Dillman's technique is to create an aesthetically pleasing, easily completed, fully integrated, cohesive questionnaire and mail package. He places special emphasis on the small details which might affect the respondents' overall impression of the questionnaire. A primary constraint of

the TDM methodology is the requirement that the questionnaire be printed in booklet format with photographically reduced pages. Dillman argues, "Printing questionnaires as booklets with photographically reduced pages requires less paper and makes the questionnaire appear far shorter than it really is. Yet by reducing the size to just over three fourths of the original typed pages, readability is retained for nearly everyone."

Five other general principles are suggested under the TDM which aid in question design. These are:

- (1) Questions should be ordered along a descending gradient of social usefulness or importance -- an effort should be made to place socially useful questions early in the questionnaire.
- (2) Questions should be grouped by items that are similar in content, and within certain content areas, by type of question. This eases the mental effort required by constantly switching types of questions and encourages well thought-out answers.
- (3) Take advantage of cognitive ties that respondents are more likely to make among groups of questions -- keep a sense of flow and continuity throughout.
- (4) The most objectionable questions to respondents should be placed after the less objectionable ones.
- (5) Demographic questions should always be placed last.

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Table 11: RELATIVE MERITS OF SURVEY TECHNIQUES

<u>Survey Method</u>	<u>Strengths</u>	<u>Weaknesses</u>
1. Face to Face Interviews	: representative sample obtained : complex questions okay : higher response rate : can screen would-be participants	: social desirability bias* : potential for poor interviewer interface : response bias : high administrative requirements : cost -- \$50 to \$75 per interview

Table 11 (Continued)

2. Telephone Surveys	: representative sample obtained : can control question sequence, ask tedious open-ended questions, screen respondent : personnel requirements minimal	: respondent substitution : questions of limited and complexity : response bias : cost -- \$25 per interview
3. Mail Surveys	: accurate answers : little response or social desirability bias : respondent completes at own pace : minimal administrative requirements  : low cost -- \$4 per completed interview	: non-response bias : selective for respondent substitution : no long, tedious, or open-ended questions : no control over sequence of question completion

\* Social Desirability Bias refers to respondents answering questions in the manner they believe the interviewer desires.

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Source: Dillman 1978; Yarborough 1986.

In developing the coupon questionnaire, Dillman's recommendations for question ordering and grouping, question development, page formulation, booklet design, and continuity were followed. Because the TDM focuses on small details, the procedures followed in designing the coupon questionnaire were extensive. See Dillman for a complete elaboration.

A total of 42 questions, investigating ten basic couponing topics, were included in the coupon questionnaire (Appendix A). Each topic selected was deemed important to the accurate development of attitudinal and demographic profiles of coupon users and non-users. In addition, past consumer coupon research provided a framework for question development. The survey contains questions which are both objective and subjective, with most response categories being multiple choice, ordinally scaled, and closed-ended for ease of data management.

#### PRETESTING THE QUESTIONNAIRE

An early draft of the questionnaire was pre-tested by a sample of colleagues, potential data users, and consumers from

the test population. These individuals were asked to complete the questionnaire, provide feedback to the researcher if anything seemed ambiguous or confusing, and make suggestions for improvement.

Four Cornell University professors, in the departments of Agricultural Economics, Consumer Economics, Rural Sociology and Communication Arts were selected to give feedback on the questionnaire. They provided insights to potential problem areas and made suggestions for improvement. In addition, food industry research specialists at American Demographics magazine and Woman's Day magazine examined the questionnaire and aided in its refinement.

The final step in pretesting the questionnaire was to confront grocery shoppers with the questionnaire in order to ascertain the validity of response categories, determine how well the questions were understood by actual respondents, and identify questionnaire problem areas.

For this purpose, 150 individuals were randomly selected in a local grocery supermarket and asked to assist in the study. In return for their assistance, they received a certificate for a free half gallon of ice cream.

#### Pretesting With A Random Sample

In order to evaluate the ability of the certificate incentive (free ice cream) to increase response rates, an experiment was conducted during the questionnaire pretest. Eighty individuals, in two separate grocery stores, were randomly approached by two interviewers and asked if they would be willing to participate in a research project being conducted by Cornell University. If the shopper agreed to assist in the study, he/she was given a packet which included all of the information needed to complete the survey. The shoppers were asked to complete the questionnaire at their convenience, but urged to return it to the university as soon as possible.

Each packet contained a cover letter explaining the purpose of the study, a copy of the questionnaire, and a self addressed, stamped return envelope. Forty of the 80 participants received the ice cream certificate immediately (in their packet), the other half were asked to complete a name and address card. For the latter group, a certificate for ice cream was sent to the address specified upon receipt of the completed questionnaire. By forcing half of the 80 shoppers to wait to receive the coupon, it was possible to determine how important the immediate incentive was in the decision to complete the questionnaire.

Completed questionnaires were received from 48 percent of those who had to wait for the coupon, but from 62 percent of



those who received the coupon immediately. Perhaps guilt played a role in boosting the response rate.

An additional 70 surveys were administered to shoppers in another supermarket of the same retail organization. Due to space constraints, it was not possible to carry out in-store interviews at both locations. Thus, these 70 shoppers received their ice cream coupon after completion of the in-store interview.

By asking shoppers to complete the questionnaire in the presence of the researchers, verbal feedback was obtained. The combination of verbal feedback (from the store administered questionnaires), and nonverbal feedback (obtained from those participants mailing the questionnaire back to the university) allowed trouble spots in the questionnaire to be pinpointed. A total of 114 surveys were completed by shoppers and used for these purposes.

#### DEVELOPING THE POPULATION LIST

Because a population list of New York State households was not available, and the costs associated with obtaining mailing lists from professional market research firms were prohibitive, a mailing list for the study was generated.

Given the budgetary and personnel constraints of the study, a sample size of 2000 households was selected. It was felt that this sample was large enough to be representative of New York State households. In addition, 2000 seemed to ensure at least one response in each of the survey's 264 question response categories for statistical analysis purposes.

New York City and surrounding suburbs were excluded from the sample for a number of reasons. Forty percent of all New York City residents have unlisted phone numbers, therefore, a sample based on listings in the New York City telephone directories would not be representative of the entire population. Moreover, there is often a long turnaround time for mail to and from New York City. This lag causes a much lower completion rate and tends to make the results of the study less reliable (Yarborough 1986).

For these reasons, a sample of exclusively upstate New York households was selected. However, to obtain an accurate cross section of New York households, 250 households were selected from each of the following upstate urban areas: Albany, Buffalo, Rochester, and Syracuse. The remaining half of the sample (the non-metropolitan) was randomly selected through a three stage process. First, a list of the current telephone directories available for New York State was obtained, and page numbers on

which listings (names and phone numbers) appeared in each book were recorded. Next, the 45 directories available were alphabetized and a random sample of 20 was drawn. This random sample included towns dispersed throughout the state. Finally, 50 unique random numbers were generated for each specific directory which corresponded to the range of page numbers on which telephone listings appeared. (For example, if the Ithaca phone directory contained listings on pages 67 to 209, random numbers were generated which fell between 67 and 209.) The lead name on the page specified through this random sampling process was the name selected for the population list. In the event that the lead name on the page was a business listing, the second name on the page was chosen. If this was also a business listing, the name found at the bottom of that column of names and phone numbers was used.

#### IMPLEMENTING A MAIL QUESTIONNAIRE

The TDM specifies a three stage implementation procedure-- an initial mailing, a postcard follow-up one week later, and a second letter two weeks after the postcard. The TDM for mail surveys relies heavily on the use of personalization in the implementation process.

#### Initial Mailing

The initial mailing of the coupon questionnaire was sent to participants in the second week of February, 1987. Each recipient received the questionnaire in a regular, business size, Cornell envelope, with first class postage. Due to the size of the mailing and the lack of high quality form feed business envelopes, the recipient's name was affixed to the envelope with a mailing label. Inside each envelope, the recipient found a personalized cover letter, a copy of the questionnaire, a business reply envelope, and a new one dollar bill.

Each cover letter was printed on Cornell letterhead, individually addressed, dated, and hand signed with "pressed blue ball point pen". The questionnaire each recipient received was coded with a mailing identification number in the upper right hand corner of the front cover. As questionnaires were returned, the respondent was marked off a master mailing list so that future mailings aimed at non-respondents would not be sent. Although Dillman discourages the use of "business reply" envelopes, one was included in the packet of material each respondent received. Because the study emphasized efficiency and lower food costs, it was decided that this theme be continued. Finally, although research on including a material incentive in a mail questionnaire is mixed, a crisp, new, one dollar bill was placed in each questionnaire packet.

Dillman (1978) advocates enclosing a material incentive with the questionnaire if possible. He believes, "The reason token financial incentives have been found so effective in mail questionnaire research may not lie in their monetary value, but rather in the fact that they are a symbol of trust. They represent the researcher's trust that the respondent will accept an offer made in good faith." Note that Dillman's argument supporting incentives was reinforced by the results of the pre-test experiment -- the inclusion of an incentive increased the response rate by 14 percentage points.

Nederhof (1983), however, believes material incentives lead to a volunteer bias (incentive induces some groups of respondents to participate and others not), and a response bias (incentive may affect the respondents' answers). Other studies have also indicated the presence of both of these biases when incentives have been included (Gelb 1975; Rush et al. 1978). Nederhof further concludes, "An initial rise in response rate obtained when an incentive is included, withers away, possibly due to the saliency of the incentive, when follow-up mailings are used." However, because the coupon questionnaire was modeled after Dillman's TDM mail survey prototype and the pre-test results supported the use of an incentive, Dillman's view on material incentives was adopted.

### Second Mailing

The second mailing consisted of a postcard mailed to all questionnaire recipients exactly one week after the initial mailing. The postcard was pre-printed, and was written as a thank you to those participants who had already returned their questionnaire, and as a reminder to those who had not. The postcard was dated, individually addressed to the questionnaire recipient, and signed by the researcher.

### Third Mailing

The final mailing, sent three weeks after the initial mailing, took on a more insistent tone. A cover letter, an additional questionnaire and a business reply envelope were included. Questionnaires were also color-coded in order to determine the impact of subsequent mailings in increasing the survey response rate.

## RESULTS OF THE MAILING

In total, 208 letters could not be delivered to the addressee. Approximately 9 percent of the metropolitan sample, and 12.7 percent of the non-metropolitan sample were returned to the researcher as dead mail. This reduced the effective sample size to 1792.

A total of 1474 questionnaires were returned. This translates to a response rate of 82.3 percent. Approximately 61 percent of the total sample responded after the first mailing--60.2 percent of the metropolitan sample, and 61.7 percent of the non-metropolitan sample. The final response rate for the metropolitan sample was 80.9 percent, while 83.6 percent of the non-metropolitan sample had responded by the end of the study period. Thus, over 20 percent of the questionnaire recipients responded as a result of follow-up procedures. Table 12 gives the exact timing of the responses.

### SECOND INITIAL MAILING

In order to better assess the precise impact of the incentive in increasing the questionnaire response rate, a second initial mailing of 200 took place during July, 1987. The questionnaire implementation procedures (including follow-up mailings to non-respondents) were identical, except that 100 households received the one dollar bill incentive, and 100 did not.

Table 12: TIMING OF RETURNS

<u>Date</u>	<u>Cumulative Return</u>	<u>Date</u>	<u>Cumulative Return</u>
February 13	Initial Mailing		
February 18	57	March 17	1398
February 20	167	March 18	1427
February 23	373	March 20	1435
February 24	594	March 24	1444
February 25	933	March 25	1448
February 26	1029	March 26	1449
March 2	1090	March 27	1451
March 4	1178	March 30	1454
March 5	1185	April 1	1456
March 6	1235	April 3	1460
March 10	1244	April 5	1463
March 11	1301	April 6	1465
March 13	1361	April 9	1470
March 16	1397	April 13	1474

The results of the second initial mailing were as follows:

- : 73% of the households receiving the incentive responded.
- : 59.5% of the households receiving no incentive responded.

- : Of those households receiving the incentive, 62.3% responded to the first mailing, and an additional 10.6% responded as a result of follow-up procedures.
- : Of those households receiving no incentive, 38% responded to the first mailing, and an additional 21.5% responded as a result of follow-up procedures.

It seems that Nederhof's (1983) assessment of the impact of material incentives is fairly accurate. The difference between the response rates elicited appears to be more greatly affected by the persistence of follow-ups than the inclusion of the incentive.

#### DATA COMPILATION

The pre-coded data were entered directly into a Lotus 123 spreadsheet. The result was a data matrix of dimensions 1474 observations by 84 variables. Each observation represented one row of the matrix, while each variable represented one column. The data was uploaded to the mainframe computer from Lotus via Cornell's emulator KERMIT, which allowed the data matrix to be transformed into an ASCII file (machine language file). This file was then converted into a SAS data set for statistical analysis. Where Likert type scales were used, the response categories were coded as follows:

<u>Code</u>	<u>Responses</u>
1	: Always, Very Important, Much Lower, Strongly Agree
2	: Frequently, Important, Slightly Lower, Agree
3	: Sometimes, Not Very Important, Unchanged, Not Sure
4	: Rarely, Not At All Important, Slightly Higher, Disagree
5	: Never, Much Higher, Strongly Disagree

#### STATISTICAL ANALYSIS

##### Response Scales

The coupon questionnaire solicited categorical data of various types. Categorical data are data which have been collected from either nominal or ordinal scales. Nominal scales are used primarily to categorize objects or events into like or different things. The number used to indicate the response does not imply any hierarchical order -- it is just used to label the category class (Rao 1987).

Ordinal scales imply ordering or ranking of objects or events along a dimension, but without interval connotations. Thus, one can make statements about the degree of possession of the property being measured (Rao 1987). However, only the order of the numbers is relevant, not the difference between them.

### Frequency Distributions

In order to develop a demographic profile of coupon users and non-users and also examine consumers' attitudes towards coupons, five statistical procedures were employed: frequency distributions, descriptive statistics, chi-square analysis, factor analysis and cluster analysis. Frequency distributions summarize data on a single variable. From these distributions, descriptive statistics (means, modes and medians) can be derived.

### Chi-Square Analysis

Chi-square analysis, or cross tabulation, summarizes data on two variables by counting the number of observations found in subgroups of the data. It measures the association between two variables which are nominally or ordinally scaled. The degree of association can be tested more rigorously with the help of a chi-square statistic (Rao 1987).

### Correlation

For categorical data, the proper correlation measure to use is Spearman's rank correlation coefficient  $r_s$ . This reflects the degree to which two variables have a linear relationship (Aaker and Day 1986). For the purposes of this study, values of  $r_s$  greater than or equal to the absolute value of .40 were recorded as showing some degree of association between variables, while values of  $r_s$  greater than the absolute value of .70 were recorded as highly correlated.

### Factor Analysis

Factor analysis studies interrelationships among variables by creating a smaller set of new variables from an original set of variables. The new variables (principal components) are linear combinations of the original variables selected in such a way that as much of the original information is retained as is possible, but without the redundancy present in the original variables (Rao 1987). They should account for a large fraction of the total variance of the original variables.

The output resulting from factor analysis can be described by four terms: factors, factor scores, factor loadings and eigen values. Factors are the new variables (principal components) created through the analysis. Factor scores are the computed values for any observation on the factors. Factor loadings

represent the correlations among the factors and the original variables (Rao 1987). An eigen value is the portion of the total variance that an individual factor accounts for among the original variables. It is equivalent to the sum of squares of the loadings associated with any factor. In general, factors with eigen values greater than 1 are retained for analysis.

Factors may also be rotated in order to gain further insights in interpreting the factors. Rotation changes the orientation of the derived factors and minimizes the number of high loadings derived so the underlying structure of the data and variables can be examined more accurately. The Varimax procedure is one of the most popular orthogonal rotations used by researchers today.

Although factor analysis can be applied to a variety of marketing problems, "One of the most versatile applications of factor analysis in marketing has been the identification of consumer types (market segments) based upon consumers responses to ... attitude and opinion statements." (Rao 1987). By identifying underlying factors and examining the factor scores, it is possible to develop a profile of various market segments with respect to their attitudes and opinions.

A factor scores model approach allows market segmentation analysis to be performed by allowing individuals with similar factor scores to be grouped (Rao 1987). Thus, individuals with high factor scores demonstrate the highest propensity for that factor. For example, if an individual has a high score for the factor coupon use, he/she is more likely to be a coupon user than someone with a low score. (See Appendix B for an application of the factor scores model.)

In the case of the coupon questionnaire, the factor scores model was utilized to segment the coupon market. Based on the mean demographic values associated with different groupings or levels of factor scores, the characteristics of those shoppers most likely to elicit certain couponing attitudes, behaviors, and opinions were derived.

### Cluster Analysis

The final technique employed in analyzing the coupon questionnaire was cluster analysis which devises a classification scheme such that individuals within classes are similar in some respect and unlike those from other classes (variability within a cluster is low, but variability between clusters is high) (Everitt 1978).

The first step in cluster analysis is to convert the raw data into a matrix of inter-individual similarity or distance (Everitt 1978). Often this similarity matrix is derived from

correlation coefficients or based on Euclidean distances (Aaker and Day 1986). Cluster analysis programs attempt to find sets of clusters that yield high similarity on the variables specified. In the case of the coupon questionnaire, these variables included the demographic characteristics and coupon usage variable. In this way it was possible to identify the characteristics of the coupon user and non-user based on demographic variables.

There are two basic approaches to clustering: a hierarchical approach, which starts with all objects in a single cluster and identifies an increasing number of clusters, and a non-hierarchical approach, which starts with all objects in separate clusters and identifies a decreasing number of clusters. SAS uses a hierarchical approach in clustering objects. The expected overall  $R^2$  and Cubic Clustering Criterion were used in determining how many clusters to create.

Because the general focus of the data analysis was to determine differences between coupon users and non-users and identify consumers' attitudes towards coupons, cross tabulation, factor analysis, and cluster analysis were natural tools for such exploration.



## SECTION IV

## EMPIRICAL RESULTS

DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLE

In order to understand the characteristics of the sample surveyed, and how these characteristics affect shopping patterns, eleven demographic variables were included in the questionnaire (Table 13).

Although an approximately equal distribution between rural and urban residents was attempted in the sample design, survey respondents classify their location as something between rural and urban. This diversity of location responses suggests that all New York State geographic types are well represented.

Respondents indicate that the number of individuals in their households ranges from one to 22. (The latter quote came from a priest living in a seminary.) Over 50 percent of respondents live in households of two or fewer, while households of five or more make up less than 13 percent of the sample surveyed.

Respondents were also asked for how many people they buy groceries. Strikingly, in almost every household size category, the number of individuals for which the respondent buys groceries is slightly higher than the number of people in the household (Table 13). Perhaps respondents shop for a disabled or elderly person, feed other people in their home (i.e. farm help), or shop for a business establishment (i.e. a seminary or bed and breakfast).

With respect to educational attainment, only 9.8 percent of the respondents have not completed high school, 33.1 percent are high school graduates, 24.3 percent indicate that they have had some college training, 21.3 percent have their college degrees, and 11.6 percent have completed some form of graduate school.

Respondents range in age from 16 to 90. Of the total sample, 21.2 percent are less than 32 years old, 31.8 percent are between 32 and 45, 21 percent are between 46 and 59, and 25.9 percent are 60 or older.

While females represent over 75 percent of the sample, 23.9 percent of the principal grocery shoppers sampled are males. Regarding marital status, 10 percent responded that they are single, 69.6 percent are married, 8.8 percent are separated or divorced, and 11.6 percent are widowed. Thus, approximately 30 percent of respondents represent the sole decision maker of the household.

As the number of women joining the work force continues to rise, the time and effort traditionally put into food preparation and shopping is likely to continue to fall. Thus, coupon use is likely to be affected. Over 50 percent of the sample indicate that the female head of the household is employed and working outside the home.

Individuals having no children at home are likely to display distinctly different shopping and coupon behaviors and attitudes than those with children living at home -- they are likely to have more time to focus on grocery shopping. Over 50 percent of the respondents of this study (51.9%) indicate that they have no children in their household. Respondents who do have children are likely to have children in their teens. Over 56 percent of the sample report having children who are 12 years old or older.

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Table 13: RESPONSE FREQUENCY TO DEMOGRAPHIC VARIABLES

Question:	Percent Response:
(a) Geographic area?	
urban	8.4%
suburban	29.2%
small to medium city	19.5%
small town	24.6%
rural	18.3%
(b) Household Size?	
one	16.9%
two	33.4%
three	19.1%
four	18.1%
five or more	12.6%
(c) Number buy groceries for?	
one	14.3%
two	34.2%
three	19.2%
four	18.6%
five or more	13.7%
(d) Level of education completed?	
some high school	9.8%
high school graduate	33.1%
some college	24.3%
college graduate	21.3%
post-college graduate	11.6%

Table 13 (continued)

Question:

Percent Response:

(e) Age?		
	less than 32	21.3%
	32 to 45	31.8%
	46 to 59	21.0%
	60 to 72	18.0%
	older than 72	7.9%
(f) Sex?		
	male	23.9%
	female	76.1%
(g) Marital status?		
	single, never married	10.0%
	married	69.6%
	separated or divorced	8.8%
	widowed	11.6%
(h) Female work status?		
	working -- career	32.3%
	working -- just a job	20.6%
	housewife -- plan to work	5.6%
	housewife -- stay at home	20.9%
	retired	19.4%
	student	1.2%
(i) Number of children?		
	zero	51.9%
	one	17.2%
	two	18.5%
	three	8.6%
	four or more	3.8%
(j) Child's age?		
	less than 4	20.4%
	5 to 11	23.3%
	12 to 18	30.1%
	over 18	26.2%
(k) Income?		
	less than \$10,000	14.3%
	\$10,000 to \$19,999	18.6%
	\$20,000 to \$29,999	22.0%
	\$30,000 to \$39,999	18.0%
	\$40,000 to \$49,999	12.9%
	\$50,000 to \$75,000	10.8%
	more than \$75,000	3.3%

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When the household indicated that more than one child was present, similar findings were observed when the ages of the other children were queried.

Finally, when income levels were examined, the responses were well distributed across all income groups: 32.9 percent of the respondents indicate that their income is less than \$20,000 a year, 40 percent say their annual income is between \$20,000 and \$39,999 per year, and 27.1 percent indicate annual earnings of more than \$40,000.

#### COMPARISON OF SAMPLE TO NEW YORK STATE CENSUS DATA

Where possible, the demographic information in this sample was compared to the profiles from the New York State Census of Population (Table 14). The New York State Census reports that the median household size for all New York State residents is two. Fifty-five percent of the New York State population live in households of two or fewer, while households of 5 or more make up 13.7 percent of the population. When comparing these figures to

Table 14: DEMOGRAPHIC COMPARISON: NEW YORK STATE AND COUPON QUESTIONNAIRE RESPONDENTS

	<u>Questionnaire:</u>	<u>1980 Census:</u>
1. Household Size		
one	16.9%	26.0%
two	33.4%	29.0%
three	19.1%	16.6%
four	18.1%	14.7%
five or more	12.6%	13.7%
2. Median Income	\$20,000 to \$29,999	\$25,370 (adjusted)
3. Working Women	52.9%	48.2%
4. Education		
some high school	9.8%	15.0%
high school grad	33.1%	34.0%
some college	24.3%	14.3%
college grad	21.3%	18.0%
post-college grad	11.6%	18.7%
5. Marital Status:		
single	10.0%	30.6%
married	69.6%	52.2%

Source: U.S. Bureau of the Census, 1987.

the current study, a high degree of correlation exists. Note (Table 14) that the general population is more likely to live alone, but the Census figure is likely to reflect the high number of single people living in the New York City metropolitan area (which was not included in the survey area).

In 1980 (the last census available), the income for a typical New York family averaged \$20,180 per year, and for a household, \$16,647. In 1985 dollars (the average annual rate of inflation from 1979 to 1985 was 7.5 percent), these amounts are respectively \$30,754 and \$25,370. The average income range in 1986 for this sample was \$20,000 to \$29,999 per year.

The female labor force participation rate quoted in the 1980 New York State Census was 48.2 percent and growing. The questionnaire results indicate that almost 53 percent of women are working in either a career or a job. The values seem to be quite comparable.

Level of education of New York State residents, as reported in the census, compare to survey results as follows (Table 14): 15 percent of all New Yorkers complete only some high school, 34 percent complete high school, 14.3 percent finish some college, 18 percent have their college degrees, and 18.7 percent have completed some or all post-graduate work.

The coupon questionnaire respondents display slightly different educational achievements. While not as many of the respondents have gone on for post-graduate degrees as the census indicates, a considerably higher proportion have gone on for further education (beyond high school). The New York State Census shows a group with more extreme educational levels -- more who don't complete high school, and more that do post-graduate work. While this may reflect the status of the diverse residents of the New York City area, it may also be an indication of a slight response bias -- people with more education may have been more willing to assist in the coupon research.

Only 10 percent of the survey respondents are single, while the New York State Census indicates that singles make up 30.6 percent of the population of New York. In addition, the census reports that only 52.2 percent of the New York State population is married, while the coupon questionnaire cites a marriage rate of almost 70 percent. Once again, New York City residents could be skewing the figures, but it may be an indication of a response bias. Single people may not feel as involved in the shopping process, and thus, felt less inclined to complete the questionnaire. Age comparisons between sample and census cannot be made directly due to differences in the age intervals reported.

Almost 14 million people live in New York State, and over

half of them reside in the New York City metropolitan area. Thus, developing a profile of typical New York State residents is difficult. However, based on the comparison of these five characteristics, it appears that the population of New York State has been fairly accurately represented by the respondents to the coupon questionnaire. If any response bias is present, it has been caused by an over-representation of more highly educated, older, married people.

#### GENERAL SHOPPING PRACTICES: FREQUENCY RESULTS

General shopping patterns were examined to contribute to the development of profiles of coupon users, and update the findings of previous studies.

A vast majority (73.5%) of the consumers sampled report that they have been the primary food purchaser for 10 years or more (Table 15), indicating the relative maturity of the consumers sampled. Sixty-one percent of the respondents indicate that they shop alone, 31.1 percent of the sample shop with a spouse, 23.3 percent shop with children, and only 14.2 percent report shopping with someone outside the nuclear family.

Although past research indicates that consumers shop an average of 2.4 times in a week (Food Marketing Institute, "Trends", 1987), the results of the coupon questionnaire reveal that only 22.1 percent of the respondents shop more than once a week. Similarly, a vast majority (89.2 percent) of respondents say they spend between a half an hour and an hour and a half shopping on a major trip. However, according to other industry research, the average amount of time consumers spend in the grocery store shopping is 22 minutes (Ziethaml 1985). Perhaps this difference can be attributed to the term "major" -- the industry average includes fill-in shopping trips to purchase only a few items.

Finally, over 92 percent of the consumers surveyed say they use coupons. The remaining 7.7 percent never use coupons. Thus, a slightly higher percentage of this study's respondents use coupons than was reported by other food industry researchers

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Table 15: CONSUMER SHOPPING PRACTICES (FREQUENCIES)

	Percent Response:
(a) Years principal shopper?	
less than 2 years	3.1%
2 to less than 6 years	11.8%
6 to less than 10 years	11.6%
10 years or more	73.5%

Table 15 (continued)

(b) Usual shopping partners:		
no one?	YES: 60.6%	NO: 39.4%
children?	YES: 23.3%	NO: 76.7%
spouse?	YES: 31.1%	NO: 68.9%
someone else?	YES: 14.2%	NO: 85.7%
(c) Frequency of major shopping?		
more than 3 times a week		3.2%
1 to 3 times a week		18.9%
once a week		55.6%
once every 2 to 3 weeks		22.3%
(d) Money spent per major shopping?		
less than \$20		6.1%
\$20 to \$39		20.4%
\$40 to \$59		24.5%
\$60 to \$79		20.5%
\$80 to \$100		18.3%
more than \$100		10.2%
(e) Time spent per major shopping?		
less than 1/2 hour		5.7%
1/2 hour to less than 1 hour		48.9%
1 to less than 1 1/2 hours		40.3%
more than 1 1/2 hours		5.1%
(f) Distance traveled to shop?		
zero -- shop on way somewhere		3.3%
less than 1 mile		21.1%
1 to less than 5 miles		49.1%
5 to less than 10 miles		16.5%
10 miles or more		10.0%
(g) Do you use coupons?		
Yes		92.3%
No		7.7%

(Nielsen 1985; Mooty 1983). Perhaps the coupon usage rate from this survey suffers from a response bias -- coupon users may have felt more inclined to complete the questionnaire.

In summary, the typical New York grocery shopper exhibits the following characteristics (Table 15): An experienced shopper, she travels, alone, 1 to 5 miles to a store where she uses coupons while shopping for half an hour to an hour on the weekly shopping trip to buy between \$40 and \$60 worth of groceries.

CONSUMER BEHAVIOR TOWARDS COUPONS: FREQUENCY RESULTS

A series of ten questions examined consumers' behavior regarding coupons. These variables explain how coupons are used by consumers and the characteristics of coupons most likely to elicit various shopping behaviors.

Years Using Coupons

The majority (56.1%) of the respondents report that they have been using coupons for seven years or more (Table 16). Note that this figure is relatively small in comparison to the 85.1 percent who have been shopping for 6 or more years, and the 92.3 percent who say they now use coupons. This provides further evidence that coupon use has indeed increased in the last decade. This seems to support the conventional notion that coupons caught on during high inflationary periods and consumers continue to use them as a matter of habit. It also suggests growing consumer awareness and acceptance of coupons and the growing number of coupons and products offering coupons.

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Table 16: CONSUMER COUPON USE PRACTICES (FREQUENCIES)

		Percent Response:				
(a)	Number of years coupons used?					
	- less than one	2.8%				
	- 1 to less than 4 years	18.8%				
	- 4 to less than 7 years	22.3%				
	- 7 years or more	56.1%				
(b)	Coupon redemption frequency?					
	- every shopping trip	56.1%				
	- every other shopping trip	19.0%				
	- one out of five trips	15.9%				
	- one out of ten trips	4.8%				
	- fewer than one out of ten trips	4.2%				
(c)	Are coupons used if:	A	F	S	R	N*
	- consumer is in					
	a hurry? .....	27.7	17.1	29.2	17.2	8.8
	- store is busy? ...	56.9	17.9	18.9	4.1	2.3
	- kids are around?..	43.9	13.6	14.3	6.2	21.9
	- customer is					
	buying just a					
	few items ? .....	39.3	20.3	29.1	9.2	2.1

\* Denotes response Always=A, Frequently=F, Sometimes=S, Rarely=R, and Never=N.

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### Commitment to Coupon Redemption

Fifty-six percent of the 1310 people studied who use coupons, redeem coupons every shopping trip. When the consumer is faced with less than ideal shopping conditions, he/she is likely to react in the following manner. Forty-five percent of coupon users will always or frequently use coupons if they are in a hurry. However, 26 percent report rarely or never using coupons under the same conditions. Three-fourths (74.8%) of respondents report always or frequently using coupons if the store is busy. By contrast, only 6.4 percent of coupon users say they rarely or never use coupons under these conditions. Based on these results, it appears that consumers are not as concerned by external pressures (long lines and other consumers) as they are by their own internal pressures to keep total shopping time to a minimum.

Finally, it was hypothesized that since fill-in shopping trips often occur on the way home or on the way someplace else, coupons may not be readily available to the shopper. Imagine John Doe calling home from the office to find out if anything is needed from the store on his way home. If dog food and a loaf of bread are requested, it is unlikely that John will have coupons for these items with him, unless he keeps them in his wallet, briefcase or car. However, this notion was rejected since only 11.3 percent indicate that they rarely or never use coupons under these circumstances.

The majority of the sample appear to display highly committed shopper characteristics, typically redeeming coupons even when in a hurry, when the store is busy, or when they are only purchasing a few items.

### Coupon Misredemption

The latest industry reports place coupon misredemption at 33 percent of all coupons redeemed ("Supermarket News" 2/27/87). Subsequently, coupon questionnaire respondents were asked how strictly they pay attention to brand name, expiration date, and size specifications on the coupons they redeem. While a social desirability bias (consumer responding in a perceived socially desirable manner) was inevitable, most respondents seem to have answered forthrightly.

Only sixty-six percent of the sample indicate that they always pay strict attention to coupon brand names (Table 17). The remaining 34 percent are potential misredeemers. Over 78 percent of the sample surveyed indicate that they always inspect coupons for expiration dates. Perhaps consumers pay more attention to this characteristic because not all coupons carry expiration dates, and this is one criteria used in culling out coupons already clipped. Finally, less than 70 percent of

respondents state they always pay strict attention to size requirements on coupons.

In summary, while a vast majority of consumers state that they pay strict attention to coupon specifications, between 20 and 30 percent are lax in their coupon redemptions. This leaves open the witting or unwitting opportunity for coupon misredemption, revealing the need for better consumer and retailer education and perhaps stricter accountability for check-out cashiers who accept misredeemed coupons which result in systemwide losses.

Table 17: COUPON MISREDEMPTION PERCEPTION (FREQUENCIES)

	A	F	S	R	N*
Do consumers pay attention to:					
- brand name on coupons used? .....	65.9	17.1	13.3	3.0	.7
- expiration date on coupons used? .....	78.3	11.8	6.5	2.5	.8
- size specs on coupons used? .....	69.5	16.3	11.0	2.2	1.0

\* Denotes response Always=A, Frequently=F, Sometimes=S, Rarely=R, and Never=N.

### Coupon Face Values

In 1986, the average face value of all coupons distributed by manufacturers was \$.298 ("1987 Nielsen Review" 1987). This actual level approximates consumers' perceptions of their own redemption practices -- 56.4 percent redeem coupons worth, on average, \$.25 to \$.39 (Table 18).

In order to determine the minimum face value required by a consumer before he/she finds value in the coupon, respondents were asked if they would clip a coupon worth \$.10, \$.25, \$.40 or \$.55. Each increment of \$.15 results in an increase in consumer clipping, but at a declining rate (i.e. +20%, +15%, +6%). Indeed, consumers demonstrate declining marginal utility with each \$.15 increment.

As the value of the coupon increases, more consumers are willing to expend the time and energy to receive the savings associated with coupon use. However, the most dramatic increase in this response appears between \$.10 and \$.25. Marketers might want to incorporate this knowledge of coupon face value threshold levels in their cost/ benefit analysis associated with future

promotional efforts.

Importance of Coupon Characteristics

Past experience with the product was the most important characteristic cited when consumers were asked how important various coupon characteristics are in their decision to clip certain coupons and not others (Table 18). Past experience was followed in importance by: coupon face value, expiration date,

Table 18: COUPON CHARACTERISTICS (FREQUENCIES)

Question:	Percent Response:				
(a) Average face value of coupons redeemed?					
less than \$.10	1.2%				
\$.10 to \$.24	10.3%				
\$.25 to \$.39	56.4%				
\$.40 to \$.55	26.1%				
more than \$.55	5.9%				
(b) Threshold values of coupons clipped:					
	A	F	S	R	N*
\$.10 .....	32.0	12.2	30.3	16.6	8.9
\$.25 .....	52.7	26.8	15.5	3.7	1.3
\$.40 .....	68.1	22.8	8.2	.5	.5
\$.55 .....	73.6	19.3	6.1	.8	.3
(c) Importance of coupon characteristics in clipping decision:					
	VI	I	NVI	NAAI**	
- past experience with product .....	62.7	34.3	2.5	.5	
- new product want to try .....	22.6	55.7	17.1	4.5	
- brand name .....	29.9	45.6	21.5	3.0	
- value of coupon ..	50.4	35.8	10.9	3.0	
- expiration date ..	34.5	38.8	19.6	7.1	
- size specifications ...	25.4	45.7	24.5	4.4	
- store location specified .....	33.6	43.0	15.6	7.8	
- ease of coupon clipping .....	15.8	31.1	33.1	20.0	

\* Denotes response Always=A, Frequently=F, Sometimes=S, Rarely=R, and Never=N.

\*\* Denotes response Very Important=VI, Important=I, Not Very Important=NVI, and Not At All Important=NAAI.

store location, brand name, size specifications, new product desirability, and ease of coupon clipping, respectively. Between 15 and 50 percent of the sample surveyed believe these factors are very important in their clipping decision.

An additional issue which is addressed by the results of this series of questions is indiscriminate coupon use. Public policy makers have voiced concern that coupons may induce consumers to purchase products they do not really want or need. However, most respondents indicate that they view past experience as the most influential coupon characteristic, followed by face value. Accordingly, while consumers may consider face values in their clipping decision, this decision is preempted by whether the consumer selects the coupon based on his own past experience with the product.

#### Clipping Frequency

Coupons are distributed to consumers through a variety of media, and determining how often consumers clip coupons from these sources is important in measuring the effectiveness of each distribution technique (Table 19). Almost 75 percent (73.5%) of respondents clip coupons once a week, while only 4.8 percent of the respondents clip coupons each day. Although the frequency of coupon clipping does not necessarily dictate the exact source of the coupon (a consumer may clip coupons from a stack of newspapers that is a month old), it does point to the potential ROP consumer -- the coupon user who clips coupons weekly.

#### Sources of Coupons

The most prevalent coupon source was newspaper inserts, cited by 87.9 percent of the respondents, followed by direct mail coupons (67 percent), in/on-pack coupons (61.1 percent), ROP coupons (56.8 percent), magazine coupons (40.7 percent), and store distributed coupons (25.4 percent).

#### Summary Profile of NY State Coupon User

In summary, the following can be said about average New York State coupon users:

- they have used coupons for at least seven years;
- they redeem coupons on every shopping trip and are willing to redeem coupons even when the shopping conditions are less than ideal;
- they say they pay strict attention to brand name, expiration dates, and size specifications on the coupons they redeem, although they are inconsistent in this behavior;
- they select coupons which are worth at least \$.25 in value, and which carry an average face value

- of \$.25 to \$.39;
- they clip their own coupons, predominantly once a week;
- the most readily used coupon sources are newspaper inserts, direct mail coupons and in and on-pack coupons;
- the most important factors leading to coupon use are past experience with the product, the value of the coupon, and whether or not the coupon is for a new product they already intend to try.

This information should prove valuable to food industry managers for an increased understanding of current consumer behavior patterns associated with coupon use.

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Table 19: COUPON CLIPPING BEHAVIOR (FREQUENCIES)

Question:	Percent Response:	
(a) Do consumers clip coupons used?		
Yes	95.5%	
No	4.5%	
(b) Frequency of coupon clipping?		
once a day	4.8%	
once a week	73.5%	
once every 2 weeks	9.8%	
once a month	7.3%	
less than once a month	4.7%	
(c) Sources of coupons:	<u>YES</u>	<u>NO</u>
- magazines	40.7	59.3
- newspaper ROP	56.8	43.2
- newspaper inserts	87.9	12.1
- in/on pack	61.1	38.9
- direct mail	67.0	33.0
- store	25.4	74.6

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### CONSUMER ATTITUDES TOWARDS COUPONS

#### Role of Coupons in Product Purchase

Almost two-thirds of the consumers surveyed disagree that coupons influence them to purchase products they do not need simply because they have a coupon for that item (Table 20). However, 29.4 percent agree that coupons manipulate their product purchase behavior. This suggests that perhaps the desire to try a new item, or the influence of the face value of the coupon exert more pressure on certain consumers than others.

Impact on Grocery Bill

A vast majority (93.1%) of the sample feel that coupon use decreases their grocery bill and coupons contribute positively to their welfare. Only 6.9 percent of the respondents feel that coupon use has no positive impact on their grocery bill -- it either stays the same or increases.

Table 20: CONSUMER ATTITUDES TOWARD COUPON USE (FREQUENCIES)  
Percent Response:

(a)	I find I sometimes buy products I don't really need if I have a coupon for them .....	<u>SA</u>	<u>A</u>	<u>NS</u>	<u>D</u>	<u>SD</u> <sup>1</sup>
		3.6	25.5	6.0	40.0	24.9
(b)	I think my use of coupons results in my grocery bill being .....	<u>ML</u>	<u>SL</u>	<u>U</u>	<u>SH</u>	<u>MH</u> <sup>2</sup>
		23.8	69.3	4.7	1.6	.6
(c)	I find that coupons let me buy more expensive brands of a product I would have bought anyway .....	<u>SA</u>	<u>A</u>	<u>NS</u>	<u>D</u>	<u>SD</u>
		13.3	42.1	12.8	26.2	5.5
(d)	Do coupons affect the brand selected? .....	<u>A</u>	<u>F</u>	<u>S</u>	<u>R</u>	<u>N</u> <sup>3</sup>
		17.9	31.4	35.8	7.8	7.1
(e)	Do these factors influence the brand selected?	<u>A</u>	<u>F</u>	<u>S</u>	<u>R</u>	<u>N</u>
	- coupon face value .....	25.8	35.3	26.9	6.0	5.9
	- relative prices of products once coupon value is figured in .....	35.8	34.4	23.0	3.8	3.0
	- reputation of the brand .....	34.4	39.4	20.9	3.5	1.8

<sup>1</sup> Denotes response categories Strongly Agree=SA, Agree=A, Not Sure=NS, Disagree=D, Strongly Disagree=SD.

<sup>2</sup> Denotes response categories Much Lower=ML, Slightly Lower=SL, Unchanged=U, Slightly Higher=SH, Much Higher=MH.

<sup>3</sup> Denotes response categories Always=A, Frequently=F, Sometimes=S, Rarely=R, Never=N.

### Role of Coupons in Brand Selection

A majority of consumers (55.4%) believe coupons allow them to purchase a more expensive brand of a product than would have been purchased otherwise. However, as the responses indicate, there seem to be two schools of thought on the matter: First, coupons do not influence the brand purchased because the consumer buys what he wants to anyway, and the second is that coupons allow consumers to upgrade their purchases.

One of the most frequent unsolicited comments received from respondents was that coupons are only clipped for products the consumer knows he will use, reinforcing the similar result that past experience is the crucial factor in coupon clipping decisions. Thus, coupon clipping seems to represent a conscious step in menu and purchase planning.

Consumers were also asked about the influence of coupons on brand choice. If a purchase is planned, does having a coupon for one brand, but not others, affect the brand selected? About one-half of respondents report always or frequently allowing the coupon to affect such a brand decision. Thus, it seems that some consumers use coupons to upgrade their purchases. In addition, the 18 percent who indicate that coupons always affect the brand selected are likely to be brand switchers, and perhaps, the indiscriminate coupon users. Persons who respond that coupons rarely or never affect the brand selected may be intensely brand loyal.

In order to identify factors likely to affect brand decisions, respondents were asked whether coupon face values, relative prices of the different brands under consideration (after the value of the coupon is taken into account), and the reputations of the brands play a role in their brand decision. The responses indicate that all three of these factors contribute to the selection process, although brand reputation was cited as the most important consideration in brand decisions. Relative prices and coupon face values followed, respectively. Note that these last two factors are interrelated -- coupon face values help determine the relative prices of brands, thus the differences in importance may be somewhat distorted.

### New Product Introduction

Because coupons are often an integral part of the promotional mix used to introduce new products, consumers were asked how they typically react when they have a coupon for a new product that they can't locate on supermarket shelves due to stock-outs or inadequate manufacturer distribution.

A majority of the respondents seem to be wary of approaching store personnel or do not bother to do so (53 percent of the

sample indicate that they rarely or never go to store personnel to ask about a new product). This may indicate an area for improvement and training of retail store personnel. Moreover, 18.3 percent say they will always or frequently do nothing when faced with this situation. Similarly, over half of the sample reveal that they are reluctant to travel to another store to locate a new product. Thus, in order for a coupon campaign to function, manufacturers need to be vigilant that their products are being stocked and properly displayed, or the effort will be compromised.

### Attitudinal Survey Results

The attitudinal section of the coupon questionnaire disclosed a number of unique results. In summary, typical grocery coupon users:

- believe coupons lower grocery bills;
- believe coupons allow more expensive brands to be purchased;
- disagree that coupons lead to indiscriminate product purchases (they don't buy what they don't need);
- agree that coupons may influence their brand selection;
- cite brand reputation, relative brand prices, and coupon face values as having some influence on brand choice (in order of decreasing importance);
- appear fairly non-aggressive in searching for new products which can't be located on store shelves.

### CONSUMER OPINIONS OF THE COUPON INDUSTRY

Both coupon users and non-users responded to five questions concerning the current coupon industry (Table 21). When satisfaction with coupon expiration dates was queried, results support current industry practices -- expiration periods are adequate. However, these responses were inconsistent with consumer comments, suggesting problems with question design. It appears that many respondents misinterpreted the question and misread "adequate" as "inadequate". Thus, the reliability of this variable may be in question.

Currently, the vast majority of coupons are distributed for dry grocery and non-food grocery items. Seventy-five percent of respondents agree or strongly agree that coupons should be available for a wider variety of products and perishables.

Over the last decade, potential impacts of total elimination of coupons have been explored. When asked to respond to the statement, "I think food prices would be lower in the absence of couponing programs," 39.3 percent of consumers agreed or strongly agreed, 36.8 percent were undecided, and 23.9 percent disagreed. Some consumers commented that, even if coupons were eliminated,



manufacturers would spend the money on other promotional activities, resulting in no net change in food prices. Others believe eliminating coupons would drive prices up because manufacturers would adopt more expensive promotional programs. Yet others feel that, if coupons were eliminated, consumers would benefit because prices would drop.

When consumers were asked if they would use more coupons if they did not have to clip them to use them (if more direct mail and computerized coupons were available), almost 50 percent agreed that more no-clip coupons would encourage coupon use. It appears likely that the coupon industry may experience even greater growth as coupon computerization is refined and becomes more widespread.

Table 21: CONSUMER OPINIONS OF THE COUPON INDUSTRY (FREQUENCIES)

	SA	A	NS	D	SD*
(a) Coupon redemption period is adequate ....	9.6	52.5	16.8	16.1	5.0
(b) Coupons should be issued for a wider variety of products ...	29.0	45.6	16.0	6.0	3.4
(c) Food prices would decrease if coupons were eliminated .....	20.5	18.8	36.8	18.6	5.3
(d) Coupon use would increase if no clipping were involved .....	16.1	32.5	21.9	25.1	4.4
(e) Coupons should be distributed in a tear-out booklet format .....	17.2	45.6	23.8	11.0	2.5

\* Denote response categories Strongly Agree=SA, Agree=A, Not Sure=NS, Disagree=D, and Strongly Disagree=SD.

Organizing and "managing" coupons by consumers has been identified as a significant constraint on further coupon growth. Distributing coupons in a tear-out booklet format might facilitate consumer coupon "management". Marketers should note that 62.8 percent of the respondents believe coupon booklets would prove beneficial to consumers.

The "opinions" section of the coupon questionnaire attempted

to assess the level of satisfaction experienced by shoppers with regard to the current coupon industry, and how well proposed changes might be received by consumers. The typical respondent:

- believes coupon expiration periods are adequate;
- agrees that coupons should be issued for a wider variety of products, particularly perishables;
- is slightly more likely to agree than disagree that food prices would decrease in the absence of couponing;
- agrees that coupon use would increase if coupons were distributed by means that did not involve clipping, such as the tear-out booklet format for coupons to keep them better organized.

### CORRELATIONS

Measures of correlations are reported for selected pairs of variables. Because the highly correlated variables ( $p \geq .70$ ) were all inter-related (e.g. the number of persons living in the same household and the number of persons the respondent shops for are highly correlated), these results are not reported here.

#### Somewhat Correlated Variables

The variables for the number of years the shopper has used coupons, respondent's age, and first child's age are all positively associated with the number of years the respondent has been the principal shopper for the household. Thus, more experienced shoppers appear to be more experienced coupon redeemers (Table 22).

Table 22: SOMEWHAT CORRELATED SHOPPING VARIABLES

	(1) Years Principal Shopper	(2) Dollars Spent Shopping
- Years Using Coupons	.41078	*
- Age	.49961	*
- Kids Age	.41266	*
- Frequency of Shopping	*	.41532
- Time Spent Shopping	*	.41346
- Household Size	*	.52118
- Number Buy For	*	.52624
- Number of Kids	*	.46319

\* Indicates not correlated.

Variables which correlate positively with the number of dollars the consumer spends per major shopping trip are: frequency of shopping, the time spent in the store, household size, the number of people the shopper is buying groceries for, and the number of children present in the household.

Further correlations associated with coupon behaviors are as follows (Table 23): frequency of coupon redemption is positively related to both redeeming coupons if the store is busy and redeeming coupons if the shopper is in a hurry -- if a person is willing to redeem a coupon under those conditions, he/she is likely to redeem more frequently than others. Persons willing to redeem coupons if the store is busy are associated with those who are willing to redeem coupons if their children are present and those who redeem coupons if they are only buying a few items; and willingness to redeem, even if the shopper is in a hurry, is correlated with redeeming coupons if the store is busy and if just a few items are needed. These coupon users may be described as highly involved.

Persons who use in and on pack coupons are likely to cite mail coupons as a major coupon source. Individuals who pay strict attention to size specifications are likely to pay attention to coupon expiration dates as well. Respondents who believe coupons influence their brand decision are also likely to be those who allow coupon face values to influence their decision. Finally, persons who want to see coupons distributed in a booklet format are more likely to also want easier access to coupons they would not have to clip. When the demographic variables were correlated, no surprising associations surfaced.

Table 23: SOMEWHAT CORRELATED COUPON BEHAVIORS

	(1) Frequency of Redemption	(2) Redeem if Store Busy	(3) Redeem if in Hurry
- Redeem if Store Busy	.55242	1.00000	.57727
- Redeem if in Hurry	.49866	*	1.00000
- Redeem if Buy Just Few Items	*	.49512	.52599
- Redeem if Kids There	*	.49943	*

\* Indicates uncorrelated variables

## SECTION V:

## RESULTS OF STATISTICAL ANALYSES

Chi-square analysis, factor analysis, and cluster analysis techniques were employed to develop profiles of various market segments. Due to similarity of results, only the Chi-square analysis is reported here. The typologies of these distinct segments are based on the significance of eight demographic variables in influencing various consumer attitudes and coupon usage patterns.

CHI-SQUARE RESULTS

Although all eight demographic variables were cross tabulated with the behavioral, attitudinal, and opinion variables, not all were significantly associated with each demographic variable using the chi-square criterion. Appendix C reports the chi-square analysis results and gives the chi-square values computed for these variables.

As a result of this analysis, nine consumer typologies, or segments, have been identified:

- Coupon user versus non-user
- Heavy coupon user versus light user
- Highly committed versus uncommitted coupon user
- Discriminating versus indiscriminate user
- Money versus time oriented shoppers
- Brand loyal versus brand switcher
- Coupon sensitive versus insensitive shopper
- Apathetic versus aggressive coupon user
- Misredeemers versus proper redeemers.

Coupon User Versus Non-User:

The vast majority of survey respondents (92.3 percent) indicate that they use coupons, at least occasionally. This user segment displays a number of significant differences from the 7.7 percent of the respondents who are non-users in terms of demographics, opinions, and shopping characteristics (Table 24).

- \* Household Size -- Coupon users predominantly reside in households of three to eight persons, while non-users are more likely to live alone or in two person households. (Seventy-six percent of those living alone use coupons, while 91.3 percent of those who live with others use coupons.)
- \* Sex -- Coupon users are predominantly female (78.4 percent of all users are female), while non-users are

only slightly more likely to be male (51.4 percent of non-users are males). Note: 95.1 percent of all females use coupons, while only 82.5 percent of males use coupons.

- \* Age -- Coupon users are more likely to be between the ages of 32 and 72 than are non-users. Between 92 and 96.6 percent of all people in these age categories use coupons, while only approximately 87 percent of respondents in the youngest and oldest age categories use coupons.
- \* Marital Status -- Coupon users are more likely to be married (96 percent of married respondents use coupons) than single (77 percent of all single respondents use coupons).
- \* Number of children -- Coupon users are more likely to have children in the household (97 percent of households with children use coupons), than not (only 88 percent of households without children use coupons).
- \* Income -- Approximately 94 percent of respondents earning between \$20,000 and \$50,000 annually use coupons. Respondents making less than \$20,000 and more than \$50,000 a year are less apt to use coupons (only 88 percent of respondents in these income categories use coupons).
- \* Years Shopping -- Coupon users are more likely to have shopped for ten or more years than are non-users. Only 6 percent of the most experienced shoppers do not use coupons, while almost 21 percent of those reporting that they have shopped for fewer than two years say they do not use coupons.
- \* Shop With Children -- Coupon users are three times as likely to shop with children (24.6 percent) as are non-users (8.2 percent).

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Table 24: VARIABLES SIGNIFICANTLY INFLUENCING COUPON USAGE  
AS DETERMINED BY CHI-SQUARE ANALYSIS\*

	<u>Chi-square value</u>
- Household Size	119.07
- Sex	49.27
- Age	23.83
- Marital Status	73.67
- Number of Children	40.74
- Income	18.19

Table 24 (Continued)

Chi-square value

- Years Shopping	24.76
- Shop with Children	15.30
- How Often Shop	13.53
- Amount Spent Shopping	35.73
- Time Spent Shopping	96.13
- Distance to Store	18.20
- Expirations Okay	64.31
- Coupons for Perishables	59.93
- No Coupons = Price Down	22.22
- More No-Clip	16.72
- Booklet Format	59.30

\* Significant at alpha = .05

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- \* How Often Shop -- Coupon non-users are likely to shop more frequently than coupon users. Almost 30 percent of coupon non-users shop more than once a week, while only 21 percent of coupon users shop this frequently.
  - \* Amount Spent Shopping -- Coupon users are likely to spend more money at the store for each major shopping than non-users. Over 90 percent of those who spend \$20 or more on a major shopping trip are coupon users, while only 77 percent of those who spend less than \$20 per shopping report using coupons.
  - \* Time Spent Shopping -- Users of coupons are likely to spend more time in the grocery store on a major shopping than non-users. Over 25 percent of coupon non-users spend less than 1/2 hour shopping, while only 4 percent of coupon users spend this length of time in the store.
  - \* Distance to Store -- Coupon users are more likely to travel farther to shop than are non-users. Of those who report shopping on the way somewhere, only 79 percent use coupons, while over 90 percent of those who travel any distance to shop use coupons.
  - \* Expiration Periods Okay -- Coupon users are more opinionated about coupon expiration periods and a majority (53.4 percent) agree that coupon expiration periods are adequate. Coupon non-users (45 percent) are more likely to have no opinion on this subject.

- \* Coupon for Perishables -- As coupon use increases, issuing more coupons for a wider variety of products (i.e. perishables) is viewed more favorably. Over 30 percent of coupon users strongly agree that coupons are needed for perishables, while only 10 percent of non-users strongly agree.
- \* No Coupons = Reduced Prices -- Coupon non-users (60 percent) are more likely to agree that coupon elimination would lower prices than are coupon users (38 percent).
- \* More No-clip Coupons -- Coupon non-users are more likely to strongly disagree (12 percent) that more no-clip coupons are needed than are coupon users (only 4 percent).
- \* Booklet Format Coupons -- Coupon users view coupons distributed in booklet format more favorably than non-users. Of those who strongly agree that coupons should be distributed by this technique, 96 percent are coupon users. Of those who strongly disagree with the statement, only 63 percent are coupon users.

The demographics, opinions, and shopping characteristics of the coupon user and non-user suggest the segmentation developed in Table 25. Perhaps it is easiest to equate coupon non-users with the psychographic concept of the "Achiever" (Atlas 1984). These individuals may be more convenience oriented and may view grocery shopping as something which is done on the spur of the moment (they shop frequently for amounts worth less than \$20) or only when absolutely necessary. Meal planning is probably not a high priority, and because they are more likely to live alone and/or have higher incomes, eating away from home may be more prevalent. If this market segment were to become involved in the shopping process, couponing and coupon use might increase. Note that geographic location, education and female work status of the survey respondents were all deemed not significant by the chi-square criterion.

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Table 25: COUPON USAGE SEGMENTATION\*

<u>Characteristic:</u>	<u>Coupon User Likely To:</u>	<u>Non-User More Likely To:</u>
- Household Size	: large	: live alone
- Sex	: female	: male
- Age	: 32 to 59	: <32 or 72+
- Marital Status	: married	: single
- Children	: have kids	: no kids
- Income	: 20K to 50K	: <20K or 50K+

Table 25 (Continued):

- Years Shopped	: 10+ years	: <10 years
- Shop with Kids	: shop with kids	: shop alone
- Shopping Frequency	: <3 times/wk	: >3 times/wk
- Time Spent Shopping	: >1/2 hour	: <1/2 hour
- Amount Spent Shopping	: >\$20 a trip	: <\$20 a trip
- Distance to Store	: 1+ miles	: shop on way
- Expirations Okay	: agree adequate	: not sure
- Coupons for Perishables	: agree need for perishables	: disagree, no need
- More No-Clip and Booklet Format	: agree need	: disagree
- No coupons = Price Down	: disagree (38%)	: agree (60%)

\* Based on degree of likelihood

#### Heavy Versus Light Coupon User:

Coupon use is also likely to increase if light users are encouraged to clip and redeem coupons more frequently. By examining how often coupons are clipped and redeemed, it is possible to develop a profile of the light and heavy coupon users (Table 27).

- \* Household Size -- Heavy coupon use is associated with larger household sizes. Over 60 percent of those living in households of five or more redeem coupons every time they shop, while only 41 percent of respondents living alone redeem coupons each shopping trip. Larger households may benefit more from the economies of coupon use.
- \* Education -- As respondents' education increase, coupon clipping frequency is likely to decrease. Forty-two percent of those who clip coupons daily are high school graduates. College graduates make up less than nine percent of those clipping daily.
- \* Age -- As age increases, coupon clipping frequency increases. Sixty-seven percent of the youngest coupon users clip coupons once a week, while 78 percent of the oldest coupon users clip coupons weekly.
- \* Marital Status -- Married individuals use coupons more frequently than single and widowed consumers. Almost



60 percent of all married respondents say they redeem coupons each shopping trip. Only 46 percent and 51 percent of single and widowed respondents, respectively, redeem coupons this often.

- \* Female Work Status -- Working women are likely to clip coupons less frequently than their homemaker counterparts who may have more time available for shopping and meal preparation. Over 83 percent of housewives clip coupons at least once a week, while 76 percent of women working in careers clip coupons this frequently. In addition, over 63 percent of housewives who plan to stay at home redeem coupons on every shopping trip, while only 54 percent of career oriented respondents redeem coupons this frequently.

Note that women working in careers and housewives who plan to work show similar coupon clipping and usage tendencies. Women who feel that their work is "just a job" and those who identify themselves as housewives who plan to stay at home are also similar. Therefore, coupon redemption and frequency response may not be just a function of time constraints, but orientation towards the traditional family as well. Women who work in "just a job" may be forced to do so out of economic necessity. Likewise, women who are housewives who plan to work may be disabled, unemployed or staying at home to care for small children.

- \* Number of children -- As the number of children in the household increases, the frequency of redemption also increases. Fifty-two percent of households without children redeem coupons every shopping trip, while over 61 percent of households with children redeem coupons every trip.
- \* Income -- Except for the lowest income group, as income increases, coupon redemption frequency is likely to decrease (Table 26). The lowest and highest income groups are the lightest coupon users, while the middle income groups are the heaviest users.

Table 26: COUPON REDEMPTION FREQUENCY BY INCOME

<u>Income (in 000's)</u>	<u>Redeem Coupons Every Trip</u>
< \$10	54%
\$10-\$20	61%
\$20-\$30	59%
\$30-\$40	58%
\$40-\$50	52%
\$50-\$75	50%
\$75+	50%

Table 27: DEMOGRAPHICS OF HEAVY vs. LIGHT COUPON USERS\*

	<u>Heavy User</u> <u>Likely To:</u>	<u>Light User</u> <u>More Likely To:</u>
Household Size	5+ people	1 person
Education	high school	college
Age	45+ years	less than 32
Marital Status	married	single
Female Work Status	family oriented	career oriented
Number of Kids	1+ children	none
Income	10K to 40K	10K or less, OR 40K+

\* Based on degree of likelihood

The segmentation suggests that single people shopping for themselves may not use coupons as frequently because they have more limited needs. Further, the elderly shopper (also lower income) might be operating under rigid budgetary or dietary constraints, and thus, be less likely to purchase heavily couponed products. These items are likely to be non-food and non-nutritious products which are generally more expensive. Finally, light coupon users appear to place a high value on their time. Results of education, female work status, and income variables provide support for this notion.

#### Highly Committed Shopper Versus Uncommitted Shopper:

Shopper commitment is measured by examining consumers' responses to various coupon redemption situations. A highly committed shopper is defined here as a consumer who redeems coupons even when: the store is busy; he/she is busy; children are present; or just a few items are needed. An uncommitted shopper is one who rarely or never redeems coupons under these circumstances. Analysis of the demographic characteristics of this segment revealed the following (Table 28):

- \* Household size -- As household size increases, the likelihood that coupons are redeemed, even under less than ideal circumstances, increases. Sixty percent of households of two or more always redeem coupons if the store is busy, while only 47 percent of single person households always redeem coupons under this circumstance.
- \* Sex -- Females (60 percent) are more likely to redeem coupons if children are present than are males (50 percent). Twenty-eight percent of males say they never redeem coupons if children are present, while only 20

percent of the females surveyed report similar behavior.

- \* Education -- As the level of education increases, coupon use when the consumer is in a hurry is likely to decrease. Over 40 percent of those without a high-school diploma always redeem coupons if in a hurry. Conversely, only 18.6 percent of college graduates always redeem coupons in this situation.
- \* Age -- As age increases, coupon redemption is likely to increase when the store is busy or when the shopper is in a rush. Sixty-one percent of consumers over 72, and only 44.6 percent of the youngest shoppers (age 32 or younger), always redeem coupons if the store is busy. When asked if coupons are used when the consumer is in a hurry, 22 percent of the youngest shoppers and 41 percent of the oldest always redeem coupons in this situation.
- \* Income -- As incomes increase, the likelihood of the shopper redeeming coupons if he/she is in a hurry or buying just a few items decreases. Over 40 percent of respondents earning less than \$10,000 a year always redeem coupons if in a hurry, while only 19 percent of the highest income group responded in this way. Similarly, over 51 percent of the lowest income group, and only 24 percent of respondents earning more than \$50,000 annually always redeem coupons if just a few items are needed.

The characteristics of the highly committed and uncommitted coupon user are displayed in Table 28. Note the similarities between the profiles of the highly committed coupon user and the heavy user, and of the light coupon user and uncommitted coupon user. The fact that these segments closely resemble each other should be reassuring to marketers trying to develop marketing strategies. Targeting the uncommitted coupon user group with coupon promotions should encourage increased coupon use.

Table 28: DEMOGRAPHICS OF HIGHLY COMMITTED vs. UNCOMMITTED  
COUPON USERS\*

	<u>Highly Committed</u> <u>Likely To:</u>	<u>Uncommitted</u> <u>More Likely To:</u>
Household Size	3+ people	less than 2
Sex	female	male
Education	high school	college

Table 28 (Continued):

Age	oldest	youngest
Marital Status	married	single
Female Work Status	family oriented	career oriented
Income	lowest levels	highest

\* Based on degree of likelihood.

#### Discriminating Versus Indiscriminate Coupon Use:

In order to determine the extent to which coupons influence product purchases (Schindler 1986), consumers were asked if coupons cause them to buy products they don't need simply because they have a coupon for the item. Cross tabulation yielded no significant demographic variables. It appears that no demographic segment of consumers is any more or less likely to be unduly influenced by coupons in product purchases.

#### Brand Loyal Versus Brand Switcher:

The influence of coupons, coupon face values, relative prices of products, and brand reputation on brand decisions was also queried (Table 29). Those most influenced by coupons and least by brand reputation are classified here as brand switchers.

- \* Household size -- As household size increases, coupon availability is more likely to affect the brand decision. Almost 9 percent of single person households claim that having a coupon for a brand never influences the brand decision, while only 1.65 percent of households of five or more make the same claim.
- \* Education -- As respondent education increases, coupon availability, coupon face values, and relative product prices are more likely to influence the brand decision. Approximately 87 percent of respondents with less than a high-school education report that coupon availability, coupon face values, and relative prices influence their brand decision. Responses elicited from college graduates show that over 94 percent allow these factors to affect the brand selected. It appears that respondents with lower education levels are more likely to be brand loyal (perhaps due to a greater "smart shopper bias") than those with higher educational achievements.
- \* Age -- As age increases, brand loyalty seems to increase. Approximately 11 percent of respondents

older than 72 years never consider coupon availability, coupon face values, relative prices, or brand reputation in brand decisions -- they are brand loyal. However, for the youngest respondents (less than 32), only 4 percent never allow these factors to enter into brand decisions.

- \* Marital Status -- Married shoppers are more likely to be brand loyal than are single consumers. Over 95 percent of single coupon users consider coupon availability, coupon face values, and relative prices (over 73 percent always or frequently consider relative prices) in brand decisions. However, only 92 percent of married respondents indicate that they allow these factors to affect their brand selection.
- \* Female Work Status -- Retired women are most likely to be brand loyal. Less than 92 percent of retired women allow coupon availability, coupon face values, relative prices, or brand reputation to play a role in brand selection. However, almost 98 percent of other work status categories consider these factors when making brand decisions. Thus, retired people show the highest degree of brand loyalty, perhaps as a result of past experience. Understanding this market segment will be increasingly important as the population ages.
- \* Number of children -- As the number of children in the household increases, the degree of brand loyalty declines. Over 5 percent of households with no children never allow coupon availability, coupon face values, relative prices, or brand reputation to influence brand decisions. It seems that these respondents buy what they want -- they are brand loyal. In contrast, only 2 percent of respondents with children never consider these factors in brand selection.
- \* Income -- As income increases, brand loyalty decreases. Almost 19 percent of respondents in the lowest income group (<\$10,000) never consider coupon availability in brand decisions, and therefore, are most apt to be brand loyal. Only 5.4 percent of respondents in the highest income group (\$75,000+) never consider this factor. Likewise, 20 percent of the respondents who never consider coupon face values in brand decisions make less than \$10,000 a year, while only 4.2 percent of the respondents in the highest income group report never considering coupon face values. However, it seems that relative prices become less of a consideration in brand decisions as income increases. Only 2.5 percent of the lowest income group never allow

relative prices to enter into brand decisions, while this figure grows to 5.4 percent for the highest income group.

Note that the description of the brand loyal shopper is similar to today's perception of the elderly shopper. Determining how to convince brand switchers to display more brand loyalty will be vital for marketers in the future. However, if brand loyalty is formed over time, and shoppers become more brand loyal as they age, then brand loyalty should increase as the overall population becomes more aged.

Table 29: DEMOGRAPHICS OF BRAND LOYAL vs. BRAND SWITCHING SHOPPERS\*

	<u>Loyal</u> <u>Likely To:</u>	<u>Switcher</u> <u>More Likely To:</u>
Household Size	less than 2	larger
Education	high school	college
Age	oldest	youngest
Marital Status	married	single
Female Work Status	retired	family/career
Number of Kids	none	1+ children
Income	lower	higher

\* Based on degree of likelihood.

#### Money Versus Time Oriented Shoppers:

In order to determine the value consumers place on their time, respondents were asked to indicate the average face value of the coupons they use and how high the coupon face value must be before a coupon is clipped (i.e. the threshold value). It was hypothesized that consumers who only clip (and use) high value coupons place a high value on their time (Table 30).

- \* Household Size -- As household size increases, the shopper is likely to place more emphasis on monetary constraints and clip coupons of lower face values. Thirty-six percent of single person households indicate that the average face value of coupons used is more than 40¢, and 31 percent will rarely or never clip a 10¢ coupon. In households of five or more, only 25 percent say the average face values of coupons used is over 40¢, and only 12 percent say they rarely ever clip a 10¢ coupon. It appears that individuals in smaller households can be more selective in their clipping and

redemption behavior and utilize only higher value coupons.

- \* Sex -- Males are more likely to redeem coupons of lower face value than are females, but they are also more likely to clip only coupons of higher face value. Over 16 percent of the male respondents redeem coupons worth less than 25¢, while only 10 percent of the females surveyed redeem coupons worth this amount. However, when asked about clipping a 25¢ coupon, 73 percent of males and over 80 percent of females report always or frequently clipping a coupon in this amount. It appears that males are more time oriented in their clipping behavior, but more money oriented in their redemption behavior.
- \* Education -- More highly educated respondents are more likely to place a high value on their time and, not surprisingly, are less inclined to clip coupons of lower values. For each coupon value selected, fewer highly educated people "always" clip these coupons than their counterparts. For example, 40 percent of those without a high-school diploma always clip a 10¢ coupon, while only 27.2 percent of post-college graduates always clip these coupons.
- \* Age -- Older shoppers tend to use coupons of lower face values than the norm. Twenty-two percent of respondents over 72 say the average face value of coupons used is less than 25¢. Only about half as many (11.5 percent) of respondents under 32 years of age use coupons worth less than 25¢. Perhaps this is related to the products elderly consumers purchase -- non-nutritious and non-food items are often cited as carrying higher coupon face values.
- \* Marital Status -- Separated/divorced consumers place the highest value on their time, while married shoppers seem to be more money oriented. Over 40 percent of separated/divorced respondents say the average face value of the coupons they use is more than 40¢. However, only 30 percent of married respondents report using coupons of this average face value. When asked about clipping threshold values, only 35 percent of separated/divorced respondents always or frequently clip a 10¢ coupon, while over 47 percent of married respondents say they always or frequently clip a 10¢ coupon.
- \* Female Work Status -- Career oriented women place a high value on their time, and therefore are less apt to clip coupons of lower values than are their family

oriented counterparts. Among career oriented women, 35 percent always or frequently clip a 25¢ coupon. However, 60 percent of family oriented women always or frequently clip a 25¢ coupon.

- \* Income -- As incomes increase, it is more likely that a higher value is placed on time relative to money. Only 7.9 percent of those respondents earning less than \$10,000 a year report only using coupons worth 55¢ or more. However, 16 percent of respondents with income over \$75,000 say the coupons they use carry an average face values of at least 55¢.

Based on this chi-square analysis, a description of time oriented (respondents placing the highest value on time, and therefore need higher coupon values to compensate them for time spent clipping and using coupons) and money oriented shoppers was developed (Table 30).

Table 30: DEMOGRAPHICS OF MONEY vs. TIME ORIENTED SHOPPERS\*

	<u>Money Oriented</u> <u>Likely To:</u>	<u>Time Oriented</u> <u>More Likely To:</u>
(1) Household Size	larger	smaller
(2) Sex	female	male
(3) Education	high school	college
(4) Age	oldest	youngest
(5) Marital Status	married	separated
(6) Female Work Status	family oriented	career oriented
(7) Income	lowest levels	highest

\* Based on degree of likelihood.

Once again, the shoppers who are most concerned by time considerations are those with presumably the least-free time for shopping and meal preparation, or those who feel least involved with shopping in general. Those respondents who demonstrate more concern for monetary considerations may be forced to be value conscious due to budgetary constraints, or may simply have more free time for shopping and couponing.

#### Coupon Sensitive versus Insensitive

Only three variables are highly associated with coupon sensitivity. They are based on consumers' perceptions of whether coupons allow them to upgrade their purchases, or if they already buy the product or brand of the desired quality. These variables are education, age, and income (Table 31).



- \* Education -- As respondents become more educated, it is likely that they already buy what they want, and therefore, are coupon insensitive. Sixty-eight percent of respondents with less than a high-school education, but only 40 percent with post-college degrees, indicate that coupons allow them to purchase more expensive brands.
- \* Age -- As age increases, consumers are more likely to be coupon sensitive. Fifty-four percent of the youngest shoppers (32 or younger) agree that coupons allow them to purchase more expensive items. However, this is true for over 66 percent of older (72+) shoppers.
- \* Income -- Increasing incomes indicate a greater likelihood that the consumer buys whatever he/she wants and coupons do not influence the brand selected. Only 22 percent of the lowest income group say they are coupon insensitive -- coupons rarely or never play a role in their purchase decision. This figure is over 48 percent for respondents with incomes over \$50,000 a year.

The three characteristics describing coupon sensitive and insensitive consumers are summarized in Table 31. Those individuals who are less affluent seem to find coupons beneficial to their well-being --- they can buy more expensive brands than they would have purchased without a coupon.

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Table 31: DEMOGRAPHICS OF COUPON SENSITIVE vs. INSENSITIVE SHOPPERS\*

	<u>Sensitive</u> <u>Likely To:</u>	<u>Insensitive</u> <u>More Likely To:</u>
Age	older	younger
Education	less educated	more educated
Income	lower	higher

\* Based on degree of likelihood.

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Apathetic Versus Aggressive Shopper:

In order to identify consumers who are more apathetic towards new products with coupon offers, respondents were asked how they typically react when they have a coupon for a new item that they cannot locate in the store (Table 32).

- \* Household size -- As the number of persons residing in the household increases, respondents show less willingness to seek help from store personnel. Twelve percent of single person households always seek help, while only three percent of households of five or more always ask store personnel for assistance in locating a new product.
- \* Sex -- Males appear to be more aggressive in their search for new products. Thirteen percent of males always seek help from store personnel, while only seven percent of the females surveyed report always asking for assistance. However, over 20 percent of males, and only 10 percent of females, never bother trying to find a new product again. Perhaps males are not only more aggressive, but more impulsive as well.
- \* Education -- Persons less highly educated are more likely to seek help from store personnel, search for the product on subsequent shopping trips and travel to other stores in search of the product. Of respondents with less than a high school education, 12 percent always seek help, only 10 percent always or frequently do not bother trying to find the item again, and 32 percent never travel to another store to locate the product. For post-college graduates, only 5 percent always ask for assistance, 28 percent always or frequently do not bother trying to locate the item on future shopping trips, and 52 percent never travel to another store.
- \* Age -- As age increases, consumers with coupons are more apt to seek out new products. Twenty-eight percent of the oldest respondents, but only 14 percent of the youngest shoppers, say they always or frequently ask store personnel for help. In addition, 18 percent of the oldest respondents always try to find the item again, while only 9 percent of the youngest shoppers will make this effort. Forty-three percent of the youngest shoppers, but only 38 percent of the oldest respondents, never travel to another store to locate a new product. Perhaps poor eyesight or desire for social interaction influences older shoppers to seek help.
- \* Marital Status -- Widowed respondents seem to be the most likely to seek help from store personnel, and least likely are single people. Over 58 percent of widowed respondents, but just 37 percent of single respondents, seek assistance from store personnel in locating a new product.

- \* Female Work Status -- Career oriented women are less likely to search for a new product when they possess a coupon for it than are family oriented women. Thirty-one percent of career oriented respondents never seek help from store clerks, while only 26 percent of family oriented females never request help from store personnel.
- \* Income -- As incomes rise, respondents are less persistent in looking for a new product. Twenty-five percent of the lowest income respondents say they always or frequently seek help from store personnel, only 11 percent always or frequently do not bother trying to locate the item again, and another 11 percent say they always or frequently travel to another store. Conversely, only 16 percent of the highest income respondents seek assistance from store personnel, 35 percent indicate that they always or frequently do not bother trying to find the product again, and only 5 percent always or frequently travel to another store to search for the item. These lower income consumers may exhibit greater "smart shopper bias" in their search for couponed new products.

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Table 32: DEMOGRAPHICS OF APATHETIC vs. AGGRESSIVE SHOPPERS\*

	<u>Apathetic</u> <u>Likely To:</u>	<u>Aggressive</u> <u>More Likely To:</u>
Household Size	larger	smaller
Sex	female	male
Education	college	high school
Age	younger	older
Marital Status	single	married
Female Work Status	career oriented	family oriented
Income	higher	lower

\* Based on degree of likelihood.

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Targeting the more apathetic coupon user is one of the challenges facing today's marketer. Note the similarity between the profile of the apathetic coupon user and the time oriented shopper (Table 30). Those shoppers under pressure to keep the length of their shopping trips to a minimum may consider the pursuit of a new product too cumbersome and require too much of their limited time.

Misredeemers versus Proper Redeemers:

Because coupon misredemption is a growing problem in today's grocery industry, developing a profile of the potential coupon misredeemer was one of the goals of this research. The following associations were revealed through cross tabulation analysis (Table 33).

- \* Household Size -- As household size increases, shoppers become more lax in the attention paid to coupon requirements. Of all single person households, approximately 75 percent pay strict attention to brand specifications, expiration dates, and size specifications. Only 42 percent of large households pay strict attention to these same requirements.
- \* Sex -- Males (72 percent) are likely to pay less attention to expiration dates than are females (over 80 percent). Similarly, only 80 percent of males always or frequently examine size requirements on coupons redeemed, while over 87 percent of female respondents make the same claim.
- \* Education -- Coupon fraud seems to be more prevalent among the most highly educated consumers. Almost 91 percent of respondents who have not completed high school always pay attention to expiration dates and 76 percent always pay attention to size specifications. Conversely, only 70 percent of post-college graduates always pay strict attention to expiration dates, and only 68 percent always pay attention to size requirements. Perhaps more highly educated respondents have a better understanding of the coupon industry, and therefore, are more lax in their redemption practices.
- \* Age -- As age of respondents increases, consumers are more likely to pay attention to coupon requirements. Of the youngest shoppers (32 or younger), 68 percent pay attention to brand names, expiration dates, and size specifications. Over 80 percent of the oldest respondents (72+ years) pay strict attention to these factors.
- \* Marital Status -- Single consumers are least likely to comply with coupon requirements, while widowed respondents demonstrate the most concern for these specifications. Only 70 percent of the single respondents always pay attention to brand names, expiration dates, and size requirements. However, 80 percent of widowed respondents always pay attention to these coupon specifications.

- \* Female Work Status -- Career oriented women are more likely to be guilty of coupon misredemption than are their family oriented counterparts. Sixty-three percent of career oriented females pay strict attention to coupon requirements, while over 74 percent of family oriented females are diligent in adhering to these specifications.
- \* Number of children -- As the number of children in the household increases, shoppers are more likely to be guilty of coupon misredemption. Approximately 74 percent of respondents without children pay strict attention to coupon specifications, while this figure drops to 50 percent for households with four or more children.
- \* Income -- As incomes increase, it appears that consumers are more likely to be coupon misredeemers. Eighty-one percent of the lowest income respondents say they always pay strict attention to expiration dates and size specifications, while less than 66 percent of the highest income respondents make the same claim.

Table 33: DEMOGRAPHICS OF MISREDEEMERS vs. PROPER REDEEMERS\*

	<u>Misredeemers</u> <u>Likely To:</u>	<u>Proper</u> <u>More Likely To:</u>
Household Size	larger	small
Sex	male	female
Education	college	high school
Age	younger	older
Marital Status	single	widowed
Female Work Status	career oriented	family oriented
Number of Children	large family	none
Income	higher	lower

\* Based on degree of likelihood.

Once again, there are many similarities between shoppers who are money oriented and proper redeemers, and those shoppers who are time oriented and likely misredeemers. It is likely that time constraints cause shoppers to be careless about coupon requirements.

### Consumer Typologies

Nine distinct consumer typologies of coupon users were developed through chi-square analysis, each characterized by a unique set of demographic factors. However, overlapping

segments, sharing a number of common attributes, are in evidence. These are: light coupon users, low commitment shoppers, brand switchers, time oriented shoppers, apathetic shoppers, likely coupon misredeemers, and coupon insensitive shoppers. The demographic characteristics displayed by each are similar. Perhaps these segments describe the shopper who considers buying groceries a nuisance and coupons an awkward or unnecessary addition to an already unpleasant task. Together these segments are likely to make up 30 percent of the total consumer market. Thus, marketers attempting to target these consumers should be aware of their orientation towards shopping and may want to formulate strategies to involve these consumers in a positive shopping experience.

## SECTION VI:

### IMPLICATIONS AND CONCLUSIONS

A review of the market segmentation analysis (Tables 24-39) reveals much of the pertinent information necessary for marketers to make more informed promotional decisions. Because many of the marketing implications are derived directly from the segmentation analysis and are identified in the Statistical Results section, only limited time is spent here elaborating these private firm strategic considerations. Rather, this section focuses predominantly on the public policy implications and conclusions resulting from the coupon study.

#### MARKETING IMPLICATIONS

##### Uninvolved/Uncommitted Coupon Users

Marketers should note that the characteristics of light coupon users, low commitment shoppers, brand switchers, time oriented shoppers, apathetic shoppers, likely coupon misredeemers, coupon insensitive shoppers, convenience oriented shoppers, low involvement shoppers, and immature shoppers are very similar. Uninvolved shoppers and uncommitted coupon users seem to be most dissatisfied with the coupon industry. They are likely to be young, single, well educated, have a career oriented female household head, earn higher income, and live in smaller households without children. It seems that larger households with children, family oriented females, married respondents, less highly educated consumers, and middle income households derive more benefit from coupon use than their counterparts (see Statistical Results section).

It is probable that these uninvolved and uncommitted consumers do not have a lot of time for shopping, list making, and meal preparation. They may find coupons a nuisance, and generally think of shopping as an unpleasant task. Marketing strategies focusing on the needs of these market segments (e.g. providing more single serving size package coupons, issuing more no-clip coupons for convenience) will lead to the improved effectiveness of coupon promotions.

##### Female Work Status

The actual work status of female heads of household plays a very limited role in influencing coupon use. Instead, orientation toward family and career explains more of underlying consumer attitudes and behaviors towards coupons and the food industry in general. Women who are more career oriented, who appear to enjoy working and regard their careers as a high priority, may be less predisposed toward the traditional view of

the role of females in society and the trappings that accompany it. Therefore, they may be less committed to the use of coupons.

Conversely, working women who are family oriented may work only out of necessity. They may clip and use coupons perhaps out of a sense of economic responsibility to their family or out of a sense of guilt. (By contrast, male shoppers, possibly because they do not have to cope as often with the additional expectations imposed on women, seem more likely to be convenience oriented.)

### Education

In exploring why highly educated consumers are less committed to coupon use than their counterparts, a high degree of correlation was found between income and education -- the highly educated shopper is likely to have a higher income. In addition, the demand for products by these high income shoppers is likely to be relatively inelastic. They earn higher incomes, generally buy what they want, and have higher opportunity costs associated with coupon use. They may not feel justly compensated for their efforts.

This lack of coupon support among more highly educated consumers may also result from the types of items for which coupons are generally available. More highly educated consumers may not purchase as many heavily couponed products (e.g. cereal, dog food, candy) or they may believe couponed brands are generally more expensive than comparable alternative brands.

In any case, it seems that uncommitted coupon users are likely to consciously decide to avoid coupon use. Thus, it is unlikely that minor changes in the coupon industry, focused on involving these shoppers in the coupon process, will drastically affect coupon redemptions.

### Household Size

Perhaps the most appropriate variable for coupon marketers to consider in coupon promotions is household size. Among the demographic characteristics explored here, this variable is the best indicator of likely coupon use. Thus, a promotional campaign based solely on coupons would probably not be as effective in New York City as it would in an area where individuals are more likely to be married, live in large households, and have children.

### General Implications

The implications for marketers are fairly straightforward. Utilizing demographic information about shoppers who are most inclined and least inclined towards using coupons, marketers will



be able to improve the efficiency and effectiveness of their marketing efforts. Promotions can be tailored to specific consumer targets with more knowledge about the likely response from the many diverse consumer segments identified in this research. (See Statistical Results section, Tables 24-33)

#### COMPARISON OF LITERATURE AND RESULTS

##### Nielsen

The Nielsen Media Research Group (Nielsen 1985) surveyed 1030 households in 1985 in an effort to understand "What Consumers Think of Coupons". A number of comparisons can be made between the results of the Nielsen study and the current study (Table 34). Although the Nielsen research provides a cursory view of current coupon trends, statistical techniques were not employed to analyze the data. In addition, the current study addresses almost three times the number of coupon topics as were included in the Nielsen research.

The final descriptive criterion listed describes consumers' attitudes towards the potential elimination of coupons. Nielsen reports that 50 percent of all households surveyed believe food prices would remain the same if coupon programs were dissolved. Less than 37 percent of the respondents in the current study believe prices would remain constant under these circumstances, and almost 40 percent believe prices would decrease if coupons were eliminated.

The substantial number of consumers in this study who believe that coupons drive food prices upward may stem from lower inflation rates (consumers may now be more keenly aware of smaller food price increases than during inflationary periods), growing coupon "saturation" (the greater number of coupons now distributed leads to more coupons for consumers to throw away), increasing coupon face values, and growing acceptance and understanding of manufacturer promotions (consumers may be becoming disenchanted with coupon promotions as major promotional events become run-of-the-mill). The Nielsen study and the current study agree in general, however, on several selected descriptive criteria.

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Table 34: COMPARISON OF NIELSEN AND MELOY RESULTS

	<u>Nielsen</u>	<u>Meloy</u>
Percent Households Using Coupons	79%	92%

Table 34 (Continued)

	<u>Nielson</u>	<u>Meloy</u>
Coupon User:		
Age	31 to 45	32 to 59
Household Size	large	large
Sex	female	female
Income (000)	\$20-\$35	\$20-\$50
Grocery		
Expenditures (major shopping)	\$61-\$80	> \$20
Results of Coupon Elimination:		
Prices Stay Same	50%	37%
Prices Down	-	40%

Source: Nielsen, "What Consumers Think of Coupons", 1985.

### Mooty

The Mooty study (1983), dealing with the use of food coupons by consumers, produced a number of areas of agreement with this research (Table 35). Enough time has elapsed since the Mooty study that the minor differences cited may be attributable to not only different samples, but also to changing consumer views of coupons as the industry itself changes.

Mooty draws attention to the differences in the weekly food-away-from-home expenditures incurred by coupon users and non-users. Specifically, coupon users are more likely to spend less money on food-away-from-home than non-users. Note the similarity between this result and the market segment described as the non-user in the current study. They both describe the same shopper types, shoppers who are less likely to be experienced shoppers, who may view grocery shopping as something which is done on the spur of the moment or only when absolutely necessary, and meal planning and preparation are probably viewed as low priority chores.

Both studies also find female work status not significantly associated with coupon use. The amount of time the female head of the household has available for domestic tasks apparently does not affect coupon use. Although the image of the harried working homemaker is vivid, female coupon use might be better explained by three alternative scenarios. Perhaps working women use more direct mail and in/on pack coupons which require less clipping effort, and therefore less time, than their stay at home counterparts. In addition, working women may have a keener appreciation for the value of a dollar and think of coupon savings in terms of their wages not foregone.

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 Table 35: COMPARISON OF MOOTY AND MELOY RESULTS
 

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	<u>Mooty</u>	<u>Meloy</u>
(1) Percent Households Using Coupons	79%	92%
(2) Sources of Coupons (in order)	: newspapers : magazines : direct mail : in/on pack	: FSIs & ROP : direct mail : in/on pack : magazines
(3) Demographic Variables Significantly Associated with Coupon Use	: number of children	: household size, age, income, marital status, sex,...

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Source: Mooty, 1983.

They may also clip and use coupons out of a sense of guilt—they may feel that their families are somewhat neglected and that using coupons, even if infrequently, is one way to demonstrate their sense of economic responsibility to the family. This ties in with Schindlers' concept of the smart shopper mechanism. Thus, perhaps the new vision of today's working female as "Supermom" is a more appropriate descriptor.

#### Gallo, Hamm and Zeller

The current questionnaire supports the USDA study (Gallo, Hamm and Zeller 1981) finding that coupon use is lower for low income households. However, no conclusive evidence was found to support the hypothesis that low income zip code areas are purposely deleted from direct mail coupon mailing lists by manufacturers.

In reviewing the most heavily couponed products list (Table 8), this research finds that, in 1986, the vast majority of these products are non-food or highly processed food items. This issue was also cited in the Gallo, Hamm and Zeller study.

#### Schindler

Schindler's research indicates that "smart shopper" mechanisms cause consumers to correlate economizing through coupon use with internal factors such as thriftiness and competence. This may cause consumers to use coupons to purchase products which are not needed or which they cannot afford, thus,

resulting in "mindless" coupon use (Zimmatore and Blumenfeld, 1983).

The coupon questionnaire yielded mixed results with respect to this issue. Less than 30 percent of the consumers surveyed indicate that coupons lead them to buy products they do not need. In addition, chi-square analysis indicates that no single demographic group of consumers was any more or less likely to exhibit these tendencies. Factor analysis did, however, indicate that the shoppers most likely to be indiscriminate coupon users are older, have lower incomes, and less education.

This suggests that the consumers who are most likely to display mindless coupon use are those who can least afford to buy unnecessary items. They are also the shoppers who may be more prone to making slightly less rational purchase decisions as compared to their more educated, discriminating counterparts. An issue may thus be defined for public policy consideration: Should coupons be eliminated to safeguard against mindless coupon use by low income, poorly educated consumers?

Because less than 30 percent of consumers indicate that coupons lead to mindless coupon use, it is improbable that action will be taken to eliminate this major promotional tool in order to "protect people from themselves". However, should mindless coupon use increase so that a higher percentage of the population is affected, public policy attention might be warranted.

#### PUBLIC POLICY IMPLICATIONS OF THE STRUCTURE AND OPERATIONS OF THE COUPON INDUSTRY

##### COSTS AND BENEFITS

One issue of central interest to this study is that of costs and benefits (i.e. the costs associated with couponing as incurred by manufacturers and society in relation to the benefits received). The costs to manufacturers include production, distribution, promotion, redemption and misredemption costs. The costs to consumers include the opportunity cost associated with clipping and using coupons rather than engaging in some other activity and the higher food prices that are the unavoidable result of manufacturers passing on their costs of doing business to consumers.

However, benefits to manufacturers include the increased sales and perhaps market share associated with effective coupon promotions. Benefits to consumers are the direct monetary savings associated with coupon use, as well as the indirect benefits of being able to upgrade purchases through the use of

coupons, the information value associated with coupons, and finally, the availability of a much expanded mix of differentiated products.

These costs and benefits are not all easily quantified. Manufacturers have been reluctant to disclose information pertaining to their coupon production and distribution expenditures. However, based on a worksheet developed by Louis J. Haugh of Westport Marketing Group, it is possible to develop estimates of the costs associated with manufacturer coupon promotions (Table 36).

In 1986, the average cost to manufacturers for each coupon redeemed was approximately \$.517 (based on distribution costs of \$5/M, a redemption rate of 3.6 percent, an 8 cent handling fee, and a coupon face value of \$.298). When coupon misredemption is factored in at 30 percent, the cost per product moved rises to \$.738. These figures suggest that manufacturers' sales increases attributable to coupon promotions must be worth at least \$.738 per item in profit in order for manufacturers to have approached the break-even point in 1986.

The net welfare impact on society is not clear. The magnitude of the unquantifiable variables (increased sales volume, and therefore profit, due to coupon promotions, the value to consumers of being able to upgrade their purchases, the opportunity costs to consumers of using coupons, etc.) remains unknown.

In addition, coupon promotions may be a social trap--consumers using coupons benefit by saving money, but there is not sufficient evidence to conclude that coupons are the most effective use of society's scarce resources.

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Table 36: ESTIMATE OF COSTS ASSOCIATED WITH COUPON PROMOTIONS

1) Distribution Costs:	
10,000,000 circulation * \$5/M	\$ 50,000
2) Redemptions (3.6%)	360,000
3) Redemption Cost 360,000 * \$.298	\$107,280
4) Handling Fees 360,000 * \$.08	\$ 28,800
5) Total Program Cost 1) + 3) + 4)	\$186,080
6) Cost-per-Coupon Redeemed 5)/2)	\$ .517
7) Actual Product Sold on Redemption (Misredemption = 30%) 360,000 * .70	252,000
8) Cost-per-Product Moved 5)/7)	\$ .738

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Source: Haugh 1981

## Distribution of Consumer Benefits

When examining the distribution of direct benefits among different income groups (in terms of consumer savings/income associated with coupon use), it appears likely that extreme income consumers (those earning less than \$10,000 or more than \$75,000 annually and who are likely to be coupon non-users) subsidize the grocery bills of the middle income coupon user (Gallo, Hamm, and Zeller 1981).

When comparing the distribution of direct benefits among just high and low income consumers, it becomes apparent that further subsidization occurs. Retailers redistribute savings/income to high income households (likely coupon misredeemers) by giving these individuals money for fraudulently presented coupons. Consequently, low income non-users not only subsidize the grocery bills of all coupon users, but low income coupon users (who are likely to properly redeem coupons) subsidize the grocery bills of high income coupon misredeemers as well.

It is difficult to effectively make comparisons between coupon programs and other promotional tools as a consequence of the lack of quantifiable evidence concerning the relative costs and benefits of these alternative promotional programs. However, the widespread use and apparent consumer sanction of coupon promotions seems to indicate that coupons produce a positive system-wide net effect.

## COUPON DISTRIBUTION

### Distribution Techniques

In the last two decades, coupon distribution techniques have become more innovative and more complex. As new distribution methods (e.g. electronically distributed coupons) gain widespread manufacturer approval, availability and equal consumer access issues will become more critical. These issues are aggravated by a growing tendency by manufacturers to target promotions towards the more affluent consumer who has more purchasing power (Bowman 1980).

Direct mail coupons exemplify the problem. If it is true that low income zip code areas are deleted from coupon mailing lists by manufacturers attempting to selectively target a market (Gallo, Hamm and Zeller 1981), then coupon access is reduced to the most needy consumers and increased to less needy consumers. As more coupons are delivered to consumers through direct mail methods (Table 6), this issue will become more pressing.

The access issue will also grow in intensity as the

proportion of coupons distributed by in and on-pack methods declines (Table 6). This is one of the more equitable distribution techniques employed by manufacturers because lower income households do not have to buy a magazine or newspaper, or live in the right zip code area, in order to gain access to coupons.

One relatively new coupon distribution technique is the inclusion of coupons in the Comics section of the Sunday newspaper. These coupons are generally for products which appeal to children (e.g. cereal). Some concerned policy makers have posed the question: Should children be thus exploited? If manufacturers proceed with this type of promotion, it could potentially lead to advertising sugared cereal on school milk cartons or using brand names to illustrate mathematical problems (e.g. If Benji has 3 Snickers bars and Gordon has 2, how many do they have together?). Some have questioned whether society has a responsibility to protect children from such advertising, while others argue that it is the parents' and schools' responsibility to filter the information reaching their children. Whatever the philosophy, some contend manufacturers have become overzealous in their attempts to reach certain target audiences.

A number of policy concerns exist regarding coupon computerization. Perhaps the most appropriate example is AT&T's automated coupon system, "Datachecker". Datachecker requires that consumers have in their possession a personalized card with a magnetized strip (such as an AT&T calling card, Mastercard or Visa) in order to activate the system. These automated tellers, again, may work to the detriment of low income households. Such households are less likely to meet the eligibility requirements for obtaining a credit card of this nature. Thus, gaining access to the coupons available becomes a problem.

Although this difficulty could be rectified with the creation of store specific magnetized cards, the short run implications are clear. Until automated coupon systems are widely adopted by grocery stores, it is unlikely that retailers will willingly implement a "store credit card" system. In the interim, low income households are likely to suffer the consequences of lack of ready coupon access.

#### Coupon Elimination

Although the concept of a fully automated coupon industry may seem futuristic, it draws attention to an issue which has been the subject of controversy since Gallo, Hamm and Zeller identified it as a problem in 1981: Do low income households effectively subsidize the grocery bills of higher income consumers?

A non-user who purchases the same item as a coupon user pays

a price which has been set by the manufacturer and retailer to cover all costs (including coupon promotional expenses) and profit. However, only the coupon user enjoys a refund equal to the face value of the coupon.

Some concerned public policy makers believe that perhaps it would be more equitable for all coupons to be eliminated and instead, food prices reduced by the corresponding amount of the coupon. Others argue that coupon users are merely being compensated for the time and effort expended in searching for, clipping, and redeeming coupons. For those who advocate elimination, there is no assurance that manufacturers will not replace coupons with a still less equitable promotional tool. For those who advocate just compensation, impediments to coupon access must be dealt with.

## PHYSICAL CHARACTERISTICS OF COUPONS

### Size Requirements

The physical characteristics of the coupons distributed today are subject to public policy scrutiny. Many consumers have voiced objection to coupon size requirements (i.e. coupon valid only for certain container sizes). This has particular implications for single person households and elderly shoppers.

Frequently, the specifications require that the consumer purchase a large container size. However, single person and small households may not be able to use the contents of an entire container before it spoils, and therefore may be hesitant to use the coupon and buy the item. Some public policy makers argue that these consumers are being penalized for having lower food consumption needs.

As a remedy to this sort of "discrimination", perhaps manufacturers could include a size checklist on the coupon for the cashier to indicate the size of the product purchased. In addition to easing size requirement issues, this would also serve as a check against coupon fraud by forcing cashiers to pay closer attention to the products purchased.

### Face Values

In 1986, the average face value of all manufacturers' coupons was 29.8 cents. However, based on the results here, it appears that manufacturers could achieve nearly comparable results with coupons of slightly lower face values. Consumers demonstrate declining marginal utility for coupon face values in excess of \$.10 (Table 18). If coupons of slightly lower value were distributed, promotional costs would be reduced and these savings could potentially be passed along to consumers in the



form of lower product costs. Given consumers' responses in this study, the net effect is likely to be beneficial to both coupon users and non-users.

The underlying public policy question is, recognizing this, will manufacturers respond by reducing coupon face values, but not lowering prices accordingly, or is competition in the industry such that manufacturers prices will be driven down? If competition does not force manufacturers to reduce their prices, public policy makers have no real recourse -- manufacturers may argue that their costs have risen in the interim and that reducing price is not a viable alternative. Compromise may be the answer.

#### HEAVILY COUPONED ITEMS

Of the eight most heavily couponed items (Table 8), only two are food products -- frozen entrees and margarine, two are beverages -- coffee and carbonated beverages, and the rest are non-food items. Thus, the most heavily couponed products are non-foods and highly processed foods. Coupons for fresh, or healthier foods, such as fresh fruits and vegetables, milk, cheese, fish, and fresh meat are virtually non-existent. Although producers are making attempts to enclose coupons with selected fresh foods, most of these commodity-type items are still un-couponed.

Some policy makers are concerned that society is sending an implicit, if unwitting, signal to consumers that highly processed foods or non-food items are more important than the basic food items. They argue that coupons encourage consumers to purchase more un-nutritious food than they would otherwise. Public policy responses may be called for.

The most highly couponed items also tend to be those for which manufacturers have been able to differentiate products. Perishables producers, even when few in number, have had difficulties since consumers tend not to differentiate between different "brands" of the same product -- a banana is viewed as a banana, whether brand A or brand B. In order for firms in a more competitive market structure (such as many perishables and commodity producers) to play a bigger role in coupon promotions, society will have to provide them with some incentive to encourage these activities. Higher margins, for example, are generally required before promotional activities can be undertaken.

### COUPON REDEMPTIONS

As coupon distribution techniques have proliferated, so has the total number of coupons distributed. In 1981, Gallo, Hamm and Zeller implied that the coupon industry was nearing optimal capacity. However, in 1981, total coupon distribution was only 102.4 billion coupons. By 1986, this number had effectively doubled to 202.6 billion coupons.

While manufacturers have been zealous in distributing coupons, the coupon redemption rate has actually decreased in the last seven years. In 1980, approximately 4.2 percent of the total coupons distributed were redeemed. In 1986, although far greater in actual number, only 3.6 percent of all coupons distributed were redeemed. Thus, it seems possible that the coupon market is now becoming saturated and that manufacturers will be required to work increasingly harder for a lower redemption return from consumers who already have too many coupons.

### COUPON CLEARINGHOUSES

Coupon clearinghouses take possession of coupons upon receipt from the retailer and accordingly, assume all of the associated risks. The coupons are counted, sorted by manufacturer, brand, face value, and then shipped to the manufacturer with an invoice indicating the amount owed the clearinghouse. Frequently, the manufacturer recounts these coupons through his own clearinghouse as a check against coupon fraud.

This double counting and sorting of coupons is an inefficient aspect of the clearinghouse concept. Although the clearinghouse attempts to position itself as an unbiased party that can be trusted to act in the best interest of both retailer and manufacturer, it appears that this trust often breaks down.

To improve the efficiency of the entire coupon system, the adoption of UPC scanners, which automatically record the item couponed in the retail store, could potentially make the clearinghouse concept obsolete in the next decade (Corliss 1987).

### MULTIPLE COUPONING

Multiple couponing (double or triple) is a competitive tool used by retailers to encourage consumers to patronize their store. However, since grocery stores operate on low net margins (approximately one percent of sales) (McLaughlin and Hawkes 1986), multiple couponing has a dramatic impact on firm profitability. As a result, some retail operations employ a

general mark-up strategy of raising the prices on a variety of heavily purchased items to compensate for the margin losses due to multiple coupons. The multiple coupon acts as the loss leader in this situation. Consumers should note that they may in fact pay more for their purchases in a multiple coupon store (due to higher overall retail prices) than they would by going to a non-doubling retail store.

### CONSUMER SUGGESTIONS

#### Physical Characteristics

Respondents comments aimed at improving the ability of the consumer to handle coupons were elicited from the coupon questionnaire. Many people said they would like to see standard coupon size restrictions imposed on manufacturers. They suggested that all coupons conform to a standard size wallet. Others commented that the light weight, slippery texture, and sticky tendencies of the paper used in printing coupons have caused consumer frustration.

#### Redemption Process

Several respondents made suggestions for improving the coupon redemption process. They voiced a desire for shopping carts equipped with pop-out coupon holders so coupons could be stored securely, but within easy reach, during the shopping trip. Others, aggravated by the lengthiness of check-out as coupon users flip through stacks of coupons, suggested a "No Coupons" lane. Much like an "Express" or "Cash Only" lane, this lane would be set up particularly for consumers without coupons. The length of the shopping trip would thereby be reduced.

## PUBLIC POLICY IMPLICATIONS OF MARKET SEGMENTATION ANALYSIS

### COUPON USERS VERSUS NON-USERS

In addition to segmenting coupon users and non-users according to their demographic characteristics, opinion and general shopping question variables were also included to enrich the segmentation process. The vast majority of consumers are at least moderately satisfied with today's coupon industry -- 92.3 percent of the consumers surveyed use coupons. In particular, large families appear to derive monetary benefit from the lower food prices resulting from coupon use. Thus, those who presumably have higher total food bills find coupons beneficial for their money saving capacity.

Males, young shoppers, single persons, households without children, and frequent shoppers are less inclined to use coupons than their counterparts. These consumers may be less experienced with the shopping process, consider shopping a nuisance and attempt to limit their involvement in anything associated with the purchase of groceries.

In general, coupons may discriminate against small households and the elderly through size specifications, and against the low income shopper through coupon availability and access issues. Coupons are less available to these groups. It appears likely that these groups subsidize the grocery bills of the more affluent coupon user.

When consumers were asked whether coupons should be eliminated, a moderate amount of support was offered. On average, 25 percent of all respondents strongly agree that food prices would fall in the absence of couponing. However, due to the uncertainty of replacement promotional tools and the relative costs of such alternatives, perhaps minor refinements can be made which will improve the efficiency and effectiveness of the current system.

To increase satisfaction levels of consumers, some recommendations can be made:

- Remove expiration dates and size specifications from coupons,
- Increase the availability of coupons for a wider variety of products (e.g. perishables),
- Issue coupons in a booklet format and,
- Increase the number of no-clip coupons.

All of these ideas elicited substantial consumer support. Several of these ideas may also lead to a more equitable total couponing program.

#### SHOPPER INVOLVEMENT/COMMITMENT

##### Age

Elderly shoppers, who consistently reported the lowest incomes of any group, manifest the greatest degree of satisfaction from coupon use. However, one concern is that this group of consumers exhibits a greater degree of shopping routinization than their younger counterparts, and therefore, may use coupons out of habit rather than desire. Some policy makers are concerned that this might lead to indiscriminate coupon use. It should be noted that overall, the elderly shopper is somewhat less likely to use coupons than other shoppers, but those who do

use coupons are highly committed.

### Education

Less educated shoppers are also likely to be highly involved with coupons. They use coupons more frequently than the more educated and search more aggressively for couponed new products. While this indicates that this group derives benefit from coupon use, it would be useful to determine on what they are basing this interest, and how brand selection is subsequently affected. Television advertising, the advice of friends, past experience, and "smart shopper bias" may all play a role in this selection process.

### Smart Shopper Bias

Coupon commitment and involvement also appears to arise out of "smart shopper bias". The desire to enjoy smart shopper feelings may cause consumers to use coupons to make "sub-optimal" product purchases. (Note that males are less likely to exhibit smart shopper bias, perhaps because shopping is a non-traditional role for them.)

Because both positive and negative factors are associated with coupon commitment, it is difficult to judge the benefit consumers derive from it. One benefit is that less educated, older, and lower income shoppers use coupons to upgrade their brand selection -- coupons allow normally purchased items to be purchased at a reduced price. However, there is no way to determine the degree of "rationality" exhibited by these shoppers in their coupon use and product selection.

### Aggressiveness

Although the degree of aggressiveness exhibited by consumers in their search for new products reveals levels of coupon involvement/ commitment, some additional issues need to be addressed. One of the difficulties with measuring the level of consumer aggressiveness is that aggressive shoppers tend to be more vocal than apathetic consumers. In addition, the more vocal consumer is likely to live in a smaller household. Thus, these small households may shape food policy in a manner that is not necessarily in the best interest of larger households.

### Brand Consciousness

Low income households tend to be the most brand conscious of the demographic segments. Note that these are the very consumers who are least able to afford to buy national brand items all of the time. Television may play a role in creating this awareness (Traub 1985). If this is the case, perhaps commercials should be forced to be more information oriented and less fluff.

### Brand Loyalty

Brand loyal shoppers also tend to have lower incomes and be less highly educated. However, it is unknown whether brand loyalty is based on habit, or whether it is a matter of conscious choice. Note that the demographic characteristics of the indiscriminate coupon user are very similar to the brand loyal consumer. Encouraging rational decision making without dictating product purchases has been a concern.

### COUPON MISREDEMPTION

Although one study reports that as many as 33 percent of all consumers readily misredeem coupons, this research indicates that coupon misredemption is most prevalent among highly educated, younger, and higher income shoppers. These shoppers may have a better understanding of the mechanics of the coupon industry and the redemption process in general, and thus, have fewer qualms about misredeeming coupons. They realize that most retailers are reluctant to confront consumers who misredeem for fear of offending those who do so accidentally.

Consequently, lower income, older, and less highly educated consumers, who expend the time and effort to properly redeem coupons, are subsidizing their counterparts' grocery bill. Some concerned policy makers argue that perhaps it would be better to remove all restrictions (other than brand specifications) from the coupons distributed. In the meantime, requiring that all coupons carry either a UPC code or an ORC code would increase the efficiency of the redemption process.

### CONCLUSIONS

This study has explored the attitudes of today's shopper towards grocery coupons and investigated coupon usage patterns. Two thousand consumers were surveyed in an effort to obtain an accurate representation of the views of today's consumer.

While the net welfare effect of the coupon industry on society is complex and difficult to evaluate, this study clearly indicates a number of areas where additional fine-tuning of coupon programs would increase the efficiency of the coupon system. Most coupon users seem to derive some benefit from the present coupon system -- 92.3 percent use coupons --and those dissatisfied are concerned by what may be considered fairly minor aspects of couponing which could be remedied with the combined efforts of both manufacturers and retailers.

This study points to a number of areas for further research.

Investigating the real costs and benefits of the coupon industry to manufacturers and consumers is imperative. Research exploring the underlying motivations of coupon users (the role of guilt in prompting career oriented females to use coupons, the role of television in influencing consumers to aggressively search out new products, the role of coupons in eliciting indiscriminate product purchases,...) would also lead to an increased understanding of consumer segments. The central question is: Are coupons, in fact, an ideal, long term, promotional tool, or would society benefit from their elimination (a notion which is supported by 25 percent of today's households)?

Perhaps it is time for marketers to integrate the positive effects of couponing (e.g. monetary savings on grocery bill, information value) with other promotional techniques in order to increase the overall effectiveness and efficiency of the grocery industry. Understanding today's increasingly diverse consumer has become a challenging task, and only through further consumer research and study will insights be gained into their needs and desires in the future.

APPENDIX A (Continued)

COUPON QUESTIONNAIRE:

Q-1 Do you do most of the grocery shopping for your household? (Circle number of your response)

- 1 YES
- 2 NO -----
- 3 SHARED EQUALLY

If yes or shared equally, please continue.

If no, please ask the major grocery shopper in your household to complete this survey.

Q-2 For how many years have you been the principal grocery shopper? (Circle number of your response)

- 1 LESS THAN 2 YEARS
- 2 2 TO LESS THAN 6 YEARS
- 3 6 TO LESS THAN 10 YEARS
- 4 10 YEARS OR MORE

Q-3 With whom do you usually shop? (Circle YES or NO for each)

- 1 NO ONE ..... YES NO
- 2 CHILDREN ..... YES NO
- 3 SPOUSE ..... YES NO
- 4 OTHER ..... YES NO

Q-4 How often do you make a major shopping trip? (Circle number of your response)

- 1 MORE THAN THREE TIMES A WEEK
- 2 ONE TO THREE TIMES A WEEK
- 3 ONCE A WEEK
- 4 ONCE EVERY TWO TO THREE WEEKS

Q-5 What is the average amount of money you spend at the grocery store each major shopping trip?

- 1 LESS THAN \$20
- 2 \$20 TO \$39
- 3 \$40 TO \$59
- 4 \$60 TO \$79
- 5 \$80 TO \$100
- 6 MORE THAN \$100

Q-6 What is the average amount of time you spend in the grocery store each major shopping trip?

- 1 LESS THAN 1/2 HOUR
- 2 1/2 HOUR TO LESS THAN 1 HOUR
- 3 1 HOUR TO 1 1/2 HOURS
- 4 MORE THAN 1 1/2 HOURS

Q-7 How far do you typically travel to shop? (Circle number of your response)

- 1 ZERO -- ALWAYS SHOP ON WAY SOMEWHERE
- 2 LESS THAN 1 MILE
- 3 1 TO LESS THAN 5 MILES
- 4 5 TO LESS THAN 10 MILES
- 5 10 MILES OR MORE



APPENDIX A (Continued)

Q-8 Do you ever use grocery coupons? (Circle number)

- 1 YES
- 2 NO

If yes,  
continue.

If no, skip Q-9 to Q-25  
and continue with Q-26 on Page 5.

Q-9 How many years have you been using coupons? (Circle number)

- 1 LESS THAN 1 YEAR
- 2 1 TO LESS THAN 4 YEARS
- 3 4 TO LESS THAN 7 YEARS
- 4 7 YEARS OR MORE

Q-10 How often do you redeem grocery coupons? (Circle number)

- 1 EVERY SHOPPING TRIP
- 2 EVERY OTHER SHOPPING TRIP
- 3 ONE OUT OF FIVE SHOPPING TRIPS
- 4 ONE OUT OF TEN SHOPPING TRIPS
- 5 FEWER THAN ONE OUT OF TEN SHOPPING TRIPS

Q-11 Will you redeem coupons if:

- (a) you are in a hurry ..... ALWAYS FREQUENTLY SOMETIMES RARELY NEVER
- (b) the store is busy and  
there is a long line of  
customers behind you ... ALWAYS FREQUENTLY SOMETIMES RARELY NEVER
- (c) your children are  
present when you shop .. ALWAYS FREQUENTLY SOMETIMES RARELY NEVER
- (d) you are only buying a  
few items ..... ALWAYS FREQUENTLY SOMETIMES RARELY NEVER

Q-12 On the coupons you redeem, do you pay strict attention to:

- (a) brand name ..... ALWAYS FREQUENTLY SOMETIMES RARELY NEVER
- (b) expiration date ..... ALWAYS FREQUENTLY SOMETIMES RARELY NEVER
- (c) size of package  
specified ..... ALWAYS FREQUENTLY SOMETIMES RARELY NEVER

**PLEASE EXPRESS YOUR DEGREE OF AGREEMENT OR DISAGREEMENT WITH THE FOLLOWING STATEMENTS.**

Q-13 I find that grocery coupons  
allow me to purchase more  
expensive brands of a  
product I would have  
bought anyway .....

STRONGLY NOT  
AGREE AGREE SURE DISAGREE DISAGREE

Q-14 I find I sometimes buy  
products I don't really  
need if I have a coupon  
for them .....

STRONGLY NOT  
AGREE AGREE SURE DISAGREE DISAGREE

APPENDIX A (Continued)

Q-15 In general, I think my use of grocery coupons results in my total grocery bill being ..... MUCH LOWER SLIGHTLY LOWER UNCHANGED SLIGHTLY HIGHER MUCH HIGHER

THE FOLLOWING QUESTIONS DEAL WITH THE TYPES OF COUPONS YOU USE.

Q-16 What is the average face value of each coupon you use? (Circle number)

- 1 LESS THAN \$.10
- 2 \$.10 TO \$.24
- 3 \$.25 TO \$.39
- 4 \$.40 TO \$.55
- 5 MORE THAN \$.55

Q-17 Does the store where you typically shop offer double or triple coupons? (Circle number)

- 1 YES
- 2 NO
- 3 SOMETIMES
- 4 DON'T KNOW

Q-18 Do you clip the coupons that you use, rather than someone giving them to you? (Circle number)

- 1 YES
- 2 NO

If you do not clip the coupons you use, please skip to Q-23 on Page 4.

Q-19 About how often do you clip coupons? (Circle number)

- 1 ONCE A DAY
- 2 ONCE A WEEK
- 3 ONCE EVERY TWO WEEKS
- 4 ONCE A MONTH
- 5 LESS THAN ONCE A MONTH

Q-20 What are your major sources of coupons? (Circle YES or NO for each)

- 1 MAGAZINES ..... YES NO
- 2 NEWSPAPERS (REGULAR NEWSPRINT PAGES) ..... YES NO
- 3 NEWSPAPERS (SPECIAL WEEKLY COUPON INSERTS) .. YES NO
- 4 COUPON IN/ON PACKAGE ..... YES NO
- 5 RECEIVED IN THE MAIL ..... YES NO
- 6 RECEIVED IN THE GROCERY STORE ..... YES NO

Q-21 Will you clip a coupon worth:

- (a) \$.10 ..... ALWAYS FREQUENTLY SOMETIMES RARELY NEVER
- (b) \$.25 ..... ALWAYS FREQUENTLY SOMETIMES RARELY NEVER
- (c) \$.40 ..... ALWAYS FREQUENTLY SOMETIMES RARELY NEVER
- (d) \$.55 ..... ALWAYS FREQUENTLY SOMETIMES RARELY NEVER

APPENDIX A (Continued)

Q-22 How important are the following factors in your decision to clip certain coupons and not others:

		How important is:			
		VERY	NOT VERY	NOT AT ALL	
(a)	Past experience with the product -- I know I like it ...	VERY IMPT	NOT VERY IMPT	NOT AT ALL IMPT	
(b)	New product I want to try .....	VERY IMPT	NOT VERY IMPT	NOT AT ALL IMPT	
(c)	Brand name of the product .....	VERY IMPT	NOT VERY IMPT	NOT AT ALL IMPT	
(d)	Dollar value of the coupon .....	VERY IMPT	NOT VERY IMPT	NOT AT ALL IMPT	
(e)	Expiration date of the coupon .....	VERY IMPT	NOT VERY IMPT	NOT AT ALL IMPT	
(f)	Size of package necessary for the coupon to be used .....	VERY IMPT	NOT VERY IMPT	NOT AT ALL IMPT	
(g)	Store location specified .....	VERY IMPT	NOT VERY IMPT	NOT AT ALL IMPT	
(h)	Ease of coupon clipping .....	VERY IMPT	NOT VERY IMPT	NOT AT ALL IMPT	

THE FOLLOWING QUESTIONS DEAL WITH HOW YOU CHOOSE BETWEEN BRANDS.

Q-23 Assuming you intended to buy a certain grocery product (e.g. a soft drink), would having a coupon affect the brand selected? .....

ALWAYS    FREQUENTLY    SOMETIMES    RARELY    NEVER

Q-24 Do the following factors influence the brand you decide to buy?

- (a) Value of the coupon .... ALWAYS    FREQUENTLY    SOMETIMES    RARELY    NEVER
- (b) Relative prices of the brands, once the value of the coupon is taken into account .....
- (c) Reputation of brand .... ALWAYS    FREQUENTLY    SOMETIMES    RARELY    NEVER

Q-25 If you have a coupon for a new product that you can't locate on the store shelves, will you:

- (a) go to store personnel to find out if it is available or request that they stock it..... ALWAYS    FREQUENTLY    SOMETIMES    RARELY    NEVER
- (b) not bother trying to find it again .....
- (c) travel to another store to locate it .... ALWAYS    FREQUENTLY    SOMETIMES    RARELY    NEVER

APPENDIX A (Continued)

THE FOLLOWING QUESTIONS ASK FOR YOUR OPINIONS OF THE COUPONING INDUSTRY.

- Q-26 I feel that the length of the redemption period is adequate on coupons with an expiration date ..... 

STRONGLY		NOT		STRONGLY
AGREE	AGREE	SURE	DISAGREE	DISAGREE
- Q-27 I would like to see coupons issued for a wider variety of items, such as more perishables ... 

STRONGLY		NOT		STRONGLY
AGREE	AGREE	SURE	DISAGREE	DISAGREE
- Q-28 I think food prices would be lower in the absence of couponing programs ..... 

STRONGLY		NOT		STRONGLY
AGREE	AGREE	SURE	DISAGREE	DISAGREE
- Q-29 I think I would use more coupons if coupons were provided to me directly (e.g. via mail or in person) by manufacturers and stores, and I did not have to clip them ..... 

STRONGLY		NOT		STRONGLY
AGREE	AGREE	SURE	DISAGREE	DISAGREE
- Q-30 I would like to see coupons distributed in a tear-out booklet form .... 

STRONGLY		NOT		STRONGLY
AGREE	AGREE	SURE	DISAGREE	DISAGREE
- Q-31 If you could change anything about grocery coupons, what would you change?
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

THE FOLLOWING QUESTIONS ASK FOR THE CHARACTERISTICS OF YOUR HOUSEHOLD. THIS WILL INCREASE OUR UNDERSTANDING OF THE NEEDS AND DESIRES OF DIFFERENT TYPES OF GROCERY SHOPPERS. IT IS, OF COURSE, STRICTLY CONFIDENTIAL.

Q-32 How would you describe the area you live in? (Circle number)

- 1 METROPOLITAN
- 2 SUBURBAN
- 3 SMALL TO MEDIUM CITY
- 4 SMALL TOWN
- 5 RURAL

Q-33 Including yourself, how many individuals are there in your household? \_\_\_\_\_

Q-34 For how many people do you generally buy groceries? \_\_\_\_\_

Q-35 Your sex: (Circle number)

- 1 MALE
- 2 FEMALE

APPENDIX A (Continued)

Q-36 Level of education completed: (Circle number)

- 1 SOME HIGH SCHOOL
- 2 HIGH SCHOOL GRADUATE
- 3 SOME COLLEGE
- 4 COLLEGE GRADUATE
- 5 POST-COLLEGE GRADUATE

Q-37 How old were you on your last birthday? \_\_\_\_\_

Q-38 What is your marital status? (Circle number)

- 1 SINGLE, NEVER MARRIED
- 2 MARRIED
- 3 SEPARATED OR DIVORCED
- 4 WIDOWED

Q-39 What is the employment status of the female head of the household? (Circle number)

- 1 WORKING -- CAREER
- 2 WORKING -- JUST A JOB
- 3 HOUSEWIFE -- PLAN TO WORK
- 4 HOUSEWIFE -- STAY AT HOME
- 5 RETIRED
- 6 STUDENT

Q-40 How many children are there in your household? \_\_\_\_\_

If you answered Q-40 with response zero, please skip Q-41.

Q-41 What are their ages? \_\_\_\_\_

Q-42 Your last total household income: (Circle number)

- 1 LESS THAN \$10,000
- 2 \$10,000 TO \$19,999
- 3 \$20,000 TO \$29,999
- 4 \$30,000 TO \$39,999
- 5 \$40,000 TO \$49,999
- 6 \$50,000 TO \$75,000
- 7 MORE THAN \$75,000

Thank you for completing this survey. If you have any questions or problems, please contact Meg Meloy at (607) 539-6429. Please return your completed questionnaire in the enclosed postage-free envelope. Once again, thank you for your cooperation and assistance.

APPENDIX A (Continued)

*Please use the space below to write any additional comments you may have.*

## REFERENCES

- " '82 Manufacturer Coupons Up 17%, A Third in Sunday Inserts." Supermarket News, 14 February 1983.
- "1974 Study of Supermarket Shoppers." Cincinnati: Burgoyne, Inc. Research for Marketing, 1974.
- "1987 Nielsen Review." Progressive Grocer, September 1987: 25-26.
- "As Inflation Rages, America Turns To Coupons." Nation's Restaurant News, 3 November 1980: 116-120.
- "Bringing Customer Focus to Coupon Redemption." MC3 Reporter 1 1986.
- "Coupon Leading Consumer Promotions." Grocery Marketing, April 1987: 1.
- "Coupon Use Low Among Young, Working Women." Marketing News, 20 April 1987: 24.
- "Electronic Coupon Handling -- MAFDA Seeks Role for State Associations." Supermarket News, 7 April 1986: 1.
- "Heavy Coupon Users: Who Are They Anyway?" NPD Insights. Chicago: NPD Research Inc., January 1987.
- "Machine-Generated Coupons Wait for Winning Company." Grocers Spotlight, February, 1986.
- "One Coupon Out of Three is Misredeemed: Nielsen." Supermarket News, 27 February 1984: 1.
- "Price-off Coupons in the Grocery Business: The Scene in the USA." Marketing World (September 1983): 9-16.
- "Telemarketing Targets Customers for Retailers, Manufacturers." Zip Target Marketing, September 1985: 46-47.
- Aaker, David S., and George S. Day. Marketing Research: Third Edition. New York: John Wiley and Sons, Inc., 1986.
- Achenbaum, Alvin A., and F. Kent Mitchel. "Pulling Away From Push Marketing." Harvard Business Review 87 (May 1987): 38-40.
- Advest Inc. "Stock of the Month: Seven Oaks International, Inc." Investor Journal May 1984: 1-2.

- Akin, John S.; Guilkey, David K.; Popkin, Barry M.; and Fannelli, Marie T. "Cluster Analysis of Food Consumption Patterns of Older Americans." Journal of The American Dietetic Association 86 (May 1986): 616-624.
- Antil, J. H. "Couponing as a Promotional Tool: Consumers Do Benefit." The Journal of Consumer Affairs 19 (Winter 1985): 316.
- Arnold, Stephen John. "A Test for Clusters." Journal of Marketing 16 (November 1979): 545-551.
- Assael, Henry. Consumer Behavior and Marketing Action. Boston: Kent Publishing Company, 1984.
- Assael, Henry, and John Keon. "Nonsampling vs. Sampling Errors in Survey Research." Journal of Marketing 46 (Spring 1982): 114-123.
- Atlas, James. "Beyond Demographics." Atlantic Monthly (October 1984): 49-57.
- Bawa, Kapil, and W. Shoemaker. "The Coupon-Prone Consumer: Some Findings Based on Purchase Behavior Across Product Classes." Journal of Marketing 51 (October 1987): 99
- Berdie, Douglas R., and John F. Anderson. "Mail Questionnaire Response Rates: Updating Outmoded Thinking." Journal of Marketing 40 (January 1976): 71-80.
- Beta Research. "Promovision Video Displays Corporation In-Store Survey (Preliminary Report)." 1985.
- Binder, David A. "Approximations to Bayesian Clustering Rules." Biometrika 68 (1981): 275-285.
- Bishop, Willard. "Competitive Intelligence." Progressive Grocer (February 1982).
- Blattberg, Robert C.; Buesing, Thomas; Peacock, Peter; and Subrata K. Sen. "Identifying the Deal Prone Segment." Journal of Marketing Research 15 (May): 369-377.
- Bloom, David, ed. "Childless Couples." American Demographics August 1986: 23-55.
- Boote, Alfred S. "Market Segmentation by Personal Values and Salient Product Attributes." Journal of Advertising Research 21 (February 1981): 29-35.
- Bowman, Russell D. Couponing and Rebates: Profit on the Dotted Line. New York: Lehar-Friedman Books, 1980.



- Campbell's Soup Company and People Magazine. The Male Food Shopper: How Men Are Changing Food Shopping in America. New York: Time, Inc., 1985.
- Cobb, Holly A. "Many Retailers Wary of Coupon Scanning." Promotions, 26 January 1987: 1.
- Corliss, Paul. President, Coupon Control, Inc., Manasquan, New Jersey. Interviews: 4 March 1987, 10 August 1987.
- Crawford, I.M., and R.A. Lomas. "Factor Analysis -- A Tool for Data Reduction." European Journal of Marketing 14 (1980): 414-421.
- Della Bitta, Albert J.; Monroe, Kent B.; and McGinnis, John M. "Consumer Perceptions of Comparative Price Advertisements." Journal of Marketing Research 18 (November 1981): 416-427.
- Dillman, Don A. Mail and Telephone Surveys -- The Total Design Method. New York: John Wiley and Sons, 1978.
- Dodd, Robert W., and Thomas W. Whipple. "Item Selection: A Practical Tool in Attitude Research." Journal of Marketing 40 (July 1976): 87-89.
- Dodson, J. A.; Tybout, A. M.; and B. Sternthal. "Impacts of Deals and Deal Retraction on Brand Switching." Journal of Marketing Research 15 (February 1978): 72.
- Doob, Anthony B.; Carlsmith, Merrill; Freedman, Jonathan L.; Landover, Thomas K.; and Soleng, Tom, Jr. "Effect of Initial Selling Price on Subsequent Sales." Journal of Personality and Social Psychology 11 (April 1969): 345-350.
- Dyer, Robert F., and Terence A. Shimp. "Enhancing the Role of Marketing Research in Public Policy Decision Making." Journal of Marketing 41 (January 1977): 63-67.
- Ekelblad, Frederick A., and Stanley F. Stasch. "Criteria in Factor Analysis." Journal of Advertising Research 1969.
- Everitt, B.S. "Unresolved Problems in Cluster Analysis." Biometrics 35 (March 1979): 169-181.
- Everitt, Brian S. Graphical Techniques for Multivariate Data. New York: North-Holland, 1978.
- Everitt, Brian. Cluster Analysis. London: Hienemann Educational Books, Ltd., 1980.
- Filser, Marc. Research on Shopping Orientations and Store Image:

- A Review. Nancy, France: Universite de Nancy II, January 1986.
- Fogarty, Allison Regina. Monograph: Cluster Analysis Determination of Industries Most Similar to the Hotel and Restaurant Industries. Cornell University, 1984.
- Food Marketing Institute. Trends: Consumer Attitudes and The Supermarket. Washington, D.C.: The Research Department, Food Marketing Institute, 1986, 1987.
- Francis, Joseph. Professor, Cornell Department of Rural Sociology, Ithaca, New York. Interviews: 28 August 1986, 13 January 1987, 11 August 1987.
- Gallo, Anthony E., and Larry G. Hamm. "Coupons: Part II." National Food Review (Summer 1982): 12-16.
- Gallo, Anthony E.; Hamm, Larry G.; and Zeller, James A. Couponing's Growth in Food Marketing Washington, D.C.: U.S. Department of Agriculture, Economic Research Service, Agricultural Economics Report Number 486, June 1982.
- Gardner, Meryl P., and Roger A. Strang. "Consumer Responses to Promotions: Some New Perspectives." Advances in Consumer Research 11 (1984): 420-425.
- Gelb, B.D. "Incentives to Increase Survey Returns: Social Class Considerations." Journal of Marketing Research 12 (1975): 107-109.
- Goyder, John. "Face-to-Face Interviews and Mailed Questionnaires: The Net Difference in Response Rate." Public Opinion Quarterly 49 (1985): 234-252.
- Harman, Harry H. Modern Factor Analysis. Chicago: The University of Chicago Press, 1960.
- Hartigan, John A. Clustering Algorithms. New York: John Wiley and Sons, Inc., 1975.
- Heenan, David A., and Robert B. Addleman. "Quantitative Techniques for Today's Decision Makers." Harvard Business Review 54 (May-June 1976): 32-62.
- Jolson, Marvin A. "How to Double or Triple Mail Survey Response Rates." Journal of Marketing 41 (October 1977): 78-81.
- Kaplan, Rachel, and Elliot Zwiebach. "Two Chains Testing Coupon Scanning." Supermarket News, 24 June 1985: 1.
- Kessler, Felix. "The Costly Coupon Craze." Fortune 113 (June 9,

- 1986): 83-84.
- Kim, Jae-On, and Charles W. Mueller. Quantitative Applications in the Social Sciences Series -- Factor Analysis: Statistical Methods and Practical Issues. Beverly Hills: Sage Publications, Inc., 1978.
- Kingsbury, Steve. "Promotion Decisions." Cincinnati: Burke Marketing Services, Inc., 1987.
- Kingsbury, Steve. "Study Provides Overview of Who's Redeeming Coupons --and Why." Marketing News, 2 January 1987.
- Koplan, Jeffrey P.; Powell, Kenneth E.; Sikes, R. Keith; Shirley, Renee W.; and Campbell, C.C. "An Epidemiologic Study of the Benefits and Risks of Running." Journal of the American Medical Association 248 (December 17, 1982): 3118-3121.
- Labrecque, David P. "A Response Rate Experiment Using Mail Questionnaires." Journal of Marketing 42 (October 1978): 82-83.
- Lazer, William, and John E. Smallwood. "The Changing Demographics of Women." Journal of Marketing 41 (July 1977): 14-22.
- Lesser, Jack A., and Marie Adele Hughes. "The Generalizability of Psychographic Market Segments Across Geographic Locations." Journal of Marketing 50 (January 1986): 18-27.
- Lessig, V. Parker. Personal Characteristics and Consumer Buying Behavior: A Multi-Dimensional Approach. Pullman: Bureau of Economic and Business Behavior, Washington State University Press, 1971.
- Looker, Anne, and Barbara Shannon. "Threat vs. Benefit Appeals: Effectiveness in Adult Nutrition Education." Journal of Nutritional Education 16 (1984): 173-176.
- Lorr, Maurice. Cluster Analysis for Social Scientists. San Francisco: Jossey-Bass Publishers, 1983.
- Lundberg, Daniel Wayne. Thesis: Cluster Analysis -- A Survey and Applications. Cornell University, 1976.
- Majers Corporation Inc. "Consumer Coupon Trend Report: Fourth Quarter 1986." Omaha: Majers Corporation Inc., 1987.
- Manufacturers Coupon Control Center. "A Chronology of Couponing." Wilton: 1986.
- Manufacturers Coupon Control Center. "Bringing Customer Focus to

- Coupon Administration and Refund Fulfillment Service." The Scanner 1 Spring 1986.
- Manufacturers Coupon Control Center. "Bringing Customer Focus To Coupon Redemption." MC3 Reporter. Wilton: Manufacturers Coupon Control Center, No.1, 1986.
- Manufacturers Coupon Control Center. "Coupon Distribution and Redemption Patterns, 1986." Wilton, Conn: 1986.
- Marriott, F.H.C. "Practical Problems in A Method of Cluster Analysis." Biometrics 27 (September 1971): 501-514.
- Marriott, F.H.C. "Separating Mixtures of Normal Distributions." Biometrics 31 (September 1975): 767-769.
- Massy, William F. "Applying Factor Analysis to A Specific Marketing Problem." Toward Scientific Marketing (December 1963): 291-307.
- Mathews, Ryan. "Coupons Go Electronic." Grocery Marketing, 5 May 1986: 36-38.
- McEnally, Martha R., and Jon M. Hawes. "The Market for Generic Brand Grocery Products: A Review and Extension." Journal of Marketing 48 (Winter 1984): 75-83.
- McLaughlin, Edward W., and Gerard F. Hawkes. A Forecast For The Grocery Industry In The 1990's. Ithaca, New York: Cornell University, Department of Agricultural Economics, Agricultural Economics Staff Paper Number 86-29, September 1986.
- McLaughlin, Edward W. Professor, Department of Agricultural Economics, Cornell University, Ithaca, New York. Interviews: July 1986 to September 1987.
- Milligan, Glenn W. "An Examination of the Effect of Six Types of Error Perturbation on Fifteen Clustering Algorithms." Psychometrika 45 (September 1980): 325-342.
- Monroe, Kent B. "Buyers Subjective Perceptions of Price." Journal of Marketing 10 (February 1974): 70-80.
- Mooty, Charlene S. "Use of Food Coupons and Cash Refund Offers by Arkansas Households." Fayetteville, Arkansas: University of Arkansas Agricultural Experiment Station Bulletin 867, June 1983.
- Narasimhan, Chakravarthi. "A Price Discrimination Theory of Coupons." Marketing Science 3 (Spring 1984): 128-147.

- Nederhof, Anton J. "The Effects of Material Incentives in Mail Surveys: Two Studies." Public Opinion Quarterly 47 (1983):103-111.
- Newspaper Advertising Bureau, Inc. "Food Shopping in One-Person Households." New York: Newspaper Advertising Bureau Inc., March 1983.
- Nielsen Clearing House. "1981 Coupon Distribution Trends." NCH Reporter. Northbrook, IL: A.C. Nielsen Company, No.1, 1982.
- Nielsen Clearing House. "A New Look At Coupons." The Nielsen Researcher. Northbrook, IL: A.C. Nielsen Company, No.1, 1976.
- Nielsen Clearing House. Another Look at What Consumers Think of Coupons. Northbrook, IL: A.C. Nielsen Company, 1975.
- Nielsen Clearing House. "Automation." NCH Reporter. Northbrook, IL: A.C. Nielsen Company, No.1, 1979.
- Nielsen Clearing House. "Bonus Couponing -- Sales Aid or Headache." NCH Reporter. Northbrook, IL: A.C. Nielsen Company, No.3, 1981.
- Nielsen Clearing House. "Coupon Distribution and Redemption Patterns by Product Group." NCH Reporter. Northbrook, IL: A.C. Nielsen Company, No.2, 1981.
- Nielsen Clearing House. Coupons -- The Consumer Speaks Out. Northbrook, IL: A.C. Nielsen Company, 1980.
- Nielsen Clearing House. "Promotion and Professionalism: Keys to Growth." NCH Reporter. Northbrook, IL: A.C. Nielsen Company, No.2, 1982.
- Nielsen Clearing House. "Speed of Redemption at the Retail Level." NCH Reporter. Northbrook, IL: A.C. Nielsen Company, No.2, 1979.
- Nielsen Clearing House. "The Growing Importance of Coupons-- and How to Use Them Effectively." Northbrook, IL: A.C. Nielsen Company, No.1, 1983.
- Nielsen Clearing House. "Three Special NCH Studies Provide New Insights Into Promotion Variables." NCH Reporter. Northbrook, IL: A.C. Nielsen Company, No.2, 1985.
- Nielsen Clearing House. "What Consumers Think of Coupons: A Study of Consumer Actions and Reactions." Northbrook, IL: A.C. Nielsen Company, 1985.

- Neslin, S. and R. Shoemaker. "A Model for Evaluating the Profitability of Coupon Promotions." Marketing Science 2 (Fall 1983): 361-388.
- Pearl, Dennis K., and David Fairley. "Testing for the Potential for Nonresponse Bias in Sample Surveys." Public Opinion Quarterly 49 (1985): 553-560.
- Presser, Stanley. "Is Inaccuracy On Factual Survey Items Item-Specific or Respondent-Specific." Public Opinion Quarterly 48 (1984):344-355.
- Prime Time Media Incorporated. "New National In-Store Couponing Program." Product Information, 10 October 1984.
- Puran, Benjamin S., and Patrick L. Odell. "Lecture Notes in Economics and Mathematical Systems -- Cluster Analysis: A Survey." New York: Springer-Verlag, 1974.
- Rao, Vithala R. Professor, S. C. Johnson Graduate School of Management, Cornell University, Ithaca, New York. Lecture Notes, Spring 1987.
- Beibstein, D. J., and A. Kavas. "Factors Affecting Coupon Redemption Rates." Journal of Marketing 46 (Fall 1982): 102.
- Roberts, M.L.; Kirshbaum, L.J.; and Cooper, L.R. "Two-Income Shoppers." American Demographics (March 1984).
- Roberts, Mary Lou, and Lawrence H. Wortzel. Marketing to The Changing Household: Management and Marketing Perspectives. Cambridge: Ballinger Publishing Co., 1984.
- Roberts, Mary Lou, and Lawrence H. Wortzel. "New Life-Style Determinants of Women's Food Shopping Behavior." Journal of Marketing 43 (Summer 1979): 28-39.
- Romesburg, Charles H. Cluster Analysis for Researchers Belmont, CA: Lifetime Learning Publications, 1984.
- Roscoe, A. Marvin; Lang, Dorothy; and Sheth, Jagdish N. "Follow-up Methods, Questionnaire Length and Market Differences in Mail Surveys." Journal of Marketing 41 (October 1977): 76-77.
- Rush, M.C.; Phillips, J.S.; and Panek, P.E. "Subject Recruitment Bias." Perceptual and Motor Skills 47 (1978): 443-449.
- Russo, Jay, and Richard Thaler. Professors, S. C. Johnson Graduate School of Management, Cornell University, Ithaca, New York. Lecture Series, August 1986 to December 1986.

- Sansola, Michael. "The Double Coupon Dilemma: Any Way Off The Competitive Treadmill." Progressive Grocer, May 1985: 44-60.
- Saunders, J.A. "Cluster Analysis for Market Segmentation." European Journal of Marketing 14 (1980): 422-435.
- Schiffman, Susan S.; Reynolds, M. Lance; and Young, Forrest W. Introduction to Multidimensional Scaling: Theory, Methods, and Applications. New York: Academic Press, Inc., 1981.
- Schindler, Robert M. Psychological Mechanisms of the Effects of Cents-Off Coupons. Chicago: University of Chicago, Center for Research in Marketing, Graduate School of Business, 1986.
- Schwartz, Norbert; Hippler, Hans-J.; Deutsch, Brigitte; and Strack, Fritz. "Response Scales: Effects of Category Range on Reported Behavior and Comparative Judgements." Public Opinion Quarterly 49 (1985):388-395.
- Scott, A.J., and M.J. Symons. "Clustering Methods Based on Likelihood Ratio Criteria." Biometrics 27 (June 1971): 387-397.
- Shimp, Terence A., and Alican Kavas. "The Theory of Reasoned Action Applied to Coupon Usage." Journal of Consumer Research 11 (December 1984): 795-809.
- Slama, Mark E., and Armen Tashchian. "Selected Socioeconomic and Demographic Characteristics Associated With Purchasing Involvement." Journal of Marketing 49 (Winter 1985): 72-82.
- Sobal, Jeffrey. "The Content of Survey Introductions and the Provision of Informed Consent." Public Opinion Quarterly 48 (1984): 788-794.
- Statistical Analysis Systems Institute. SAS User's Guide: Basics, Statistics. Cary, NC: SAS Institute Inc., 1982.
- Stewart, David W. "The Application and Misapplication of Factor Analysis in Marketing Research." Journal of Marketing Research 18 (February 1981): 51-62.
- Strang, Roger A. The Economic Impact of Cents-Off Coupons. Northbrook: Nielsen Clearing House, 1981.
- Symons, M.J. "Clustering Criteria and Multivariate Normal Mixtures." Biometrics 37 (March 1981): 35-43.
- Tedin, Kent L., and Richard Hofstetter. "The Effects of Cost and Importance Factors on the Return Rate for Single and

- Multiple Mailings." Public Opinion Quarterly 46 (1982): 122-128.
- Traub, James. "The World According to Nielsen: Who Watches Television and Why." Channels of Communication 4 (January/February 1985): 26-29.
- Tryon, Robert C., and Daniel E. Bailey. Cluster Analysis. New York: McGraw-Hill Book Company, 1970.
- Uhl, J. N. "Cents-Off Coupons: Boon or Boondoggel for Consumers?" Journal of Consumer Affairs 16 (Summer 1987): 161.
- United States Bureau of the Census, Department of Commerce. 1980 Census of The Population: Characteristics of The Population of New York. Washington, D.C., 1982.
- United States Bureau of the Census, Department of Commerce. Statistical Abstract of the United States: 1987. Washington, D.C., 1987.
- Vilcassim, Naufel, and Richard R. Wittink. Manufacturers Use of Coupons: Perspectives and Implications. Ithaca: Cornell University, S. C. Johnson Graduate School of Management, 1986.
- Ward, Ronald W., and James E. Davis. "Coupon Redemption." Journal of Advertising Research 18 (August): 51-58.
- Wolfe, John H. "Comparative Cluster Analysis of Patterns of Vocational Interest." Multivariate Behavioral Research 13 (January 1978): 33-44.
- Wolfe, John H. "Pattern Clustering by Multivariate Mixture Analysis." Multivariate Behavioral Research 5 (July 1970): 329-350.
- Yarborough, Paul. Director, Cornell Rural Communication Research Program, Cornell University, Ithaca, New York. Interviews: 6 August 1986, 12 January 1987.
- Ziethaml, Valarie A. "The New Demographics and Market Fragmentation." Journal of Marketing 49 (Summer 1985): 64-75.
- Zimmatore, J.J., and W.S. Blumenfeld. "Consumers Mindlessness: I Believe It, But I Don't See It." Unpublished Paper, Department of Psychology, Georgia State University, Atlanta, Georgia, 1983.