

## Examining the Influence of Values and Lifestyles on Environmental Decisions

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The focus in this paper is on consumer values and lifestyles as one part of the creation of and solutions to the complex solid waste management problem. Research-based knowledge of effective methods to change consumer environmental behavior is provided. Eco-consciousness, lifestyle flexibility, and intrinsic motivation are the focus of educational programs designed to achieve long term changes in consumer behavior.

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Solid waste management is a complex issue facing individuals, local communities, and our larger society. Policymakers and waste educators have focused most of their attention and resources on developing markets for recycled products, teaching households the "how to's" of recycling or composting, developing waste disposal technology, and siting landfills. In comparison, the roles that values, consumer decisionmaking and lifestyles play in reducing solid waste problems have largely been ignored. Research-based knowledge of effective methods to change the waste management behavior of households is even more limited.

Perhaps never before have so many consumer lifestyles and behaviors needed to change in so short a time, and stay changed, if the environment is to be protected for current and future generations. Consumer educators can contribute an understanding of the impact of lifestyles on the generation of waste, and long term changes in consumer behavior to the multi-disciplinary issue of solid waste.

### Lifestyles and Environmental Behavior

Lifestyles are an expression of our values, beliefs, and attitudes demonstrated through the purchase and allocation of human and non-human resources (Knutson, 1983). Solid waste disposal issues are reminders that our lifestyles, our chosen patterns of behavior, are testing the earth's capacity. Consumers make dozens of lifestyle decisions everyday which affect the solid waste stream, the larger environment, and the quality of life of current and future generations. Many consumers are raising the question of "how can we choose lifestyles which allow us to realize our full human potential and preserve the environment at the same time?" (Devall, 1988).

Existing research on long-term consumer behavior change, especially conservation and environmental behavior, suggests that intentions to change and actual behavior depend upon a variety of influences (Cook & Berrenger, 1981; DeYoung, 1984; Fishbein and Ajzen, 1975; Neimeyer, 1990). Household environmental behavior appears to be a function of resource constraints, predisposing attitudes and beliefs, macro environmental factors, and knowledge and experience. Research consistently suggests that the three most influential change factors are predisposing attitudes and beliefs, specifically: 1) lifestyle flexibility (perceived costs and benefits and change); 2) eco-consciousness (perceived interrelationships of self and environment); and 3) the type of motivation (intrinsic/extrinsic).

Individuals who have greater lifestyle flexibility and eco-consciousness are more likely to make long-term changes in their lifestyles to

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ten products of the year. Products in the second category are selected because they reflect characteristics which suggest that they are more environmentally sound. Such characteristics could include: 1) made from and/or packaged in recyclable materials; 2) not excessively packaged or wrapped; 3) sold in reusable containers or products for which refills are available; 4) not disproportionate users of energy or other resources in manufacturing, use or disposal and; 5) not dangerous to the health of people or animals.

Educators can buy products to enable participants to actually examine, or describe each product with a picture on a card. Educators could ask participants to discuss the following questions: 1) What is your impression of the lifestyle of a person who would buy such a product? 2) What do you think is important to a person buying such a product? What are their values and beliefs? 3) If money were no object, would you buy this product? Why or why not? and 4) Which of these products are most people you know most likely to purchase? Why? This small group exercise helps raise questions regarding resource tradeoffs, lifestyle flexibility, and influences on consumption decisions.

Examine lifestyle flexibility and the role of values. Educational programs can also be developed which help consumers to examine and discuss which activities they are willing or unwilling to incorporate into their lifestyle and the reasons for such decisions. For example, one activity lists specific options for reducing, reusing, or recycling from simple to complex such as: 1) pay to have bagged yard waste picked up by trash hauler; 2) take bagged yard waste to a community composting site; 3) leave grass clippings on the lawn and start a backyard compost site and; 4) illegally dump yard waste in a local dumpster. Discussion questions can focus on why an option was or was not chosen and how such choices might differ among members of the same household, or among different households. Participants could be encouraged to discuss: a) the tradeoffs in human and non-human resources involved in lifestyle decisions, and b) why some households are more likely to be flexible in household inputs, actions, or outputs.

Educators could also develop activities to increase awareness of the relationship between personal value systems and environmental actions as well as individuals' willingness to change their lifestyles. Consumers could rank values such as convenience, frugality, efficiency, quality, participation in social causes, freedom of choice, materialism and others from most to least important. Consumers could also discuss ways more eco-conscious household inputs, actions, or outputs might challenge an individual's most important values. Lifestyle decisions relating to feminine products and diapers are excellent topics for such a discussion. For example, discussion could focus on how existing value systems are challenged by suggestions such as: a) women should be required to give up tampons and use washable cotton pads as a feminine product alternative, or b) communities should ban all disposable diapers from being sold. Additional examples of potential lifestyle changes can be tailored for the age group of learners.

Consumer educators face the challenge of creating educational programming which helps consumers develop intrinsic motivation to lead more eco-conscious and flexible lifestyles. The educational development ideas presented in this paper offer a place to begin to recognize and integrate the role of values and lifestyles as part of solid waste problems and solutions. Such a complex issue will require multi-disciplinary approaches and integration.

NOTE: Educational resources described above can be obtained from the author.

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## Educating and Motivating Consumers to Manage Household Waste

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Managing municipal solid waste is a problem across the United States that is receiving an increasing amount of attention. The USDA Extension Service included waste management among its national initiatives that guide educational programs. In July of 1988, Pennsylvania lawmakers passed Act 101, The Municipal Waste Planning, Recycling and Waste Reduction Act. This law changed the way many consumers handle their household waste. The two programs described below were developed to meet the educational needs of the Commonwealth's citizens.

### Stashing Your Trash... Where Does Your Garbage Go?

Stashing Your Trash... Where Does Your Garbage Go? is designed to educate consumers about managing nonhazardous household waste. Objectives of the program are to:

- 1) Provide consumers with a brief overview of the solid waste situation in Pennsylvania.
- 2) Provide consumers with strategies they can use to manage household waste and to help reduce the costs associated with waste.

Components of the program include:

- 1) A teaching outline with suggested resources that can be used to address a topic.
- 2) An audio tape of the teaching outline that can be played while doing routine activities, driving, or riding in a motor vehicle.
- 3) Transparency masters.
- 4) A slide, tape, and script that addresses the need for recycling and other waste reduction behaviors.
- 5) Supporting slides that can be used instead of the transparencies.
- 6) Handouts and fact sheets with information and tips for consumers.

- 7) Slides that illustrate the amount of garbage each person and a family of four make during different time periods (day, week, month, and year).
- 8) Aids to help users implement the program in their local community (e.g., sample program announcements for radio or newspapers, registration forms).
- 9) References and other sources for additional background information.

Transparencies, handouts, and program evaluation forms are also on computer disk. Since each county extension office in Pennsylvania has the same type of computer (Macintosh) and work processing program (Microsoft Word), transparencies and other disk resources can be tailored for audiences.

### Agent Inservice Education

The inservice education for county extension agents who deliver this program includes an on-site visit to a processing facility for recyclable materials and a transfer station. A transfer station is a facility where garbage haulers take community waste. At the transfer station, waste is weighed and compacted into large trucks before being taken to a nearby landfill.

### Hazardous Products in the Home

This program helps consumers recognize the hazardous nature of common household products and encourages them to manage (use, store, and dispose) hazardous products safely. Preventing water pollution and health problems are emphasized in this program.

This program contains the same components as those described in Stashing Your Trash...Where Does Your Garbage Go? In addition, a 10 item

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## Research Findings and Hypotheses for Future Studies of Occasional (Secondhand) markets in Consumer Products

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Markets for secondhand consumer goods offer an area of research opportunities to enhance both economic efficiency and environmental improvement. Exploratory research surveys of consumers as sellers and buyers indicate a rich variety of markets, behavior patterns, products, and non-market exchanges affecting secondhand goods.

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### Introduction

The focus of the analysis of consumers in many disciplines essentially is limited to the activities related to the acquisition and use of products and services. The emphasis is on those products produced and marketed new for ultimate consumers. The worthiness of new newly purchased consumer goods is the focus of economics, marketing and other disciplines.

The use and disposal of goods has arisen as a concern because of environmental costs and problems, particularly solid waste disposal. Many factors affect the solid waste flow including quantities of goods produced and sold, the nature of the use (is it used up, transformed, disposed, unchanged, etc.), and the life of use and storage by consumers. Aside from the business, industrial, productive, supply side of the economy, the ultimate consumers use, storage, and disposal of products then should receive some focus in order to determine the factors influencing their contributions to the solid waste flow.

The economics of the consumer behavior and other factors influencing consumer use and disposal of goods deserves attention from the point of view not only of the environment, but in order to enhance the value of products to consumers.

The extreme case of a product that is entirely used up by ultimate consumers and thus does not reenter the economy in a physical sense might include real estate, landscape products, or items transformed by burning or digestion. On the other extreme are old computers and newspapers sent to the solid waste disposal facility (dump).

Within this oversimplified scenario of possibilities are secondary markets for consumer goods. Secondary markets for goods could extend their useful lives, reduce the amounts of resources needed to make new goods, and reduce the solid waste stream both by using up goods and delaying their entry into the solid waste stream. These markets and their transactions would produce real wealth in the sense that goods would be redistributed to consumers who would obtain more utility from them than would the original buyers and users of those goods as new goods. Whether measures of the economy are appropriate to reflect this real value is not of concern here.

### Secondary Market Institutions

It is useful to consider market and non-market exchanges of consumer goods in order to more fully appreciate the nature of such markets. Many goods are transformed in use and may be sorted and disassembled as well as physically consumed. A vast range of exchanges is possible and exists in many current examples. These goods are exchanged among consumers in almost unnoticed ways in everyday life. Food is purchased, reassembled, cooked, and served to others. We loan out pocketknives, handkerchiefs, and pencils to each other within household and among associates for long and short, major and minor, uses. These are gifts of major cultural significance

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Interviews were obtained at the convenience of graduate students working for class credit.

3. June, 1991. Interviews of persons who had made a purchase at a "yard sale or garage sale in 1991" were conducted as in Phase 2. The particular questions chosen for this phase were based on results in Phase 2 in part and included detailed measures of opinions about the characteristics of seller operations as well as concepts of buyers (but not directly about themselves). Results of this phase showed much evidence that such occasional sales involve strong social and cultural factors or at least participants report such perceptions.
4. November, 1991. Interviews conducted similarly to the previous three phases, but designed to elicit behavioral and opinion results about all types of secondhand and used consumer goods. A large portion of the responses concerned gifts of secondhand items.

The four phases to date are exploratory in nature primarily because the nature of the secondary markets for consumer goods is so little documented in the literature. It would be unwise to assign quantitative measures to the results because the methodology was heavily influenced by whatever convenience criteria were used to select respondents by a select group of interviewers.

#### Summary of Results: Phase 1

Respondents were all kinds of sellers.

The nature and size of activities included yard sales that lasted a few hours and were generally at or near residences of the sellers. Self-described flea markets were often regularly occurring, but were also one time events for which many consumers congregated to sell items. Some flea markets were charity events for which merchandise was donated and others for charities included individual sellers selling for their own accounts, but paying a fee for the right to participate. A variety of second hand goods stores, including antique stores, were identified. Some were permanent businesses, some were operated by charities. A select number of entrepreneurs were found to be engaged in occasional or part time buying and

selling of items ranging from collectibles to large items such as boats.

Most yard sales had a variety of household merchandise. Some were described as specializing in a few lines such as books or baby items. Flea markets were larger and the merchandise selections were overall very broad. Notably, there were no specialty flea markets such as for antiques or garden items as are known to exist elsewhere. Likewise no fairs or hobbyist events were reported. The stores tended to have specialties (antiques, collectibles, clothes, etc.) rather than to be self-described as generalists in all sorts of merchandise. A few stores reported value-added operations such as fixing broken items, deliveries, refinishing, etc. Stores reported selling some new merchandise either donated by merchants or unspecified as to source.

The reasons for selecting items for sale varied from business reasons or market-derived reasons to the motives and purposes of the sellers. Yard sale merchandise was selected for sale often to get rid of it. Stores were market driven. Charity stores took what they were given. Businesses and charities with retail locations often reported special situations where they took advantage of social opportunities such as donated vehicles, office equipment, or distress merchandise lots and tried to capitalize on the situation.

Locations for sellers were influenced by a number of factors. These included convenience for yard sales (their name suggests it). Rents were important for some - they often had very low price locations in old and decrepit facilities. Retail location criteria were mentioned in the normal range of such criteria (parking, traffic flow, nearby to other stores, correct facility type and size, etc. Small stores that had been in operation for some time reported relocating as near as they could to their previous locations.

Promotion strategies for yard sales ranged from none (other than being visible) to the use of signs (one or many with the purpose being to give directions) to advertising (notices or using classified advertising). Flea markets relied on word of mouth more and tried to maintain regular hours and locations usually on a weekly basis.

came. They were irritated by early morning shoppers who came before opening time. Flea market operators mentioned the need for cooperative efforts with sellers. Charity flea markets expect volunteered efforts to operate, prepare and close the market and a sense of charitable purpose.

#### General Conclusions about Sellers

Phase 1 was the only part of the research to date that explored marketers/sellers. The retailers had no unusual or unexpected problems although their businesses differ in respect to their "used" merchandise. Flea markets and, especially, yard sales on the other hand, were unique selling operations with a range of problems rarely seen in established forms of retailing. These sellers appear motivated by non-conventional reasons as well. They conduct their operations in such different ways from regular retailers that standard marketing analyses of their operations may fail to appreciate their nature as well as to provide strategy recommendations that can be successfully adopted. With the caveat that the measures of these retailers' behaviors are known only as to their range in part and not as to the frequency that they occur, these hypothesis for further research are proposed:

1. Occasional market operators in secondhand consumer goods enter the market for nonbusiness or non-economic reasons.
2. Occasional market operators understand the behavior of their customers.
3. Occasional market operators choose appropriate business strategies to achieve their goals.

As the purpose of this research is in part to develop new and expanded secondary markets, the hypotheses above do not directly lend themselves, proven or disproved, to this purpose. It may well be that research into the existing market may never do so. Current markets may be only atrophied versions of what might be developed with the application of better strategies that are yet to be tried in yard sales and flea markets. Revolutionary changes could come about, for example, if sellers simply applied better methods in their sales practices. We can not offer proof from this

research of any better methods, however.

#### Summary of Results: Phases 2, 3, 4

Following upon the results of the study of sellers, the subsequent parts of the research focused on the customers. Implicit in this shift to buyers is the philosophy that a better understanding of customers would be a basic beginning point for revising and improving seller performance. Also, buyers may provide insights about sellers that would go beyond what sellers, who are very unsophisticated marketers in the conventional sense, may have learned on their own.

These phases of the research are focused on occasional markets, particularly yard sales. Combined findings are reported from the three subsequent surveys.

Product purchases from yard sales varied in many respects, but certain characteristics of the hundreds of mentions can be seen much more frequently than others. Consumers tend to use specific generic descriptions of purchases (books, chairs, luggage, etc.) rather than brand names, but on occasion specify brands (Fisher-Price, Avon, Tupperware), an indication presumably of the additional satisfaction gained from obtaining the brand. While many goods are durables, collectibles, old (antique is not the term of consumers) things of all sorts, decorative household items, and toys were frequently mentioned as actual purchases, bias may be introduced by using recall interviews where the more significant items are remembered. Nonetheless, some individuals purchased plants, clothes, toiletries, kitchen utensils, and personal products in quite some variety.

Product assortment was the most fervently criticized aspect of yard sales. People said they did not like a lot of junk, limited variety, broken items, bad looking items, "crummy" things, small things, plastics, new (as in being sold by a merchant through a yard sale) products, cloths, clothes, ceramics, "just dug up" items, battered goods, and worthless (expletive). By far the product complaints relate to quality and responses reflect often on the character or credibility of such sellers.

On the contrary, there were many statements that several buyers said were never true.

1. "There ought to be legal restrictions on the way yard sales are conducted"
2. "I buy from people who look like they could use the money"
3. "I buy something at each sale"
4. "Buyers are poor or needy"
5. "Sellers would take something back if it was defective"
6. "Sellers are uninformed about their products"
7. "Sellers are pushy and sell too aggressively"
8. "I learn about people and neighborhoods in my stops at yard sales"

Of the 25 statements tested, only these received two or more strongest mentions from the 47 respondents whose results were usable. Note that no statement appears on both lists. While these are the strongly stated views of a small number of individuals, little of this information allows identification of groups within the sample (i.e. market segments) who had certain characteristics as groups notably different from others in the sample. These groupings may exist, of course, and their existence would be important in developing strategies to increase yard sale markets and to assist yard sale operators in improving their success levels in attracting customers.

When consumers are asked questions about second hand items overall with no mention at all in the survey as to the source of the product (market or non-market), the types of goods obtained are overlapping with the responses in the yard sale questions. There are many similar points raised about value, price, quality, etc. as well as similar concerns about sellers expressed about sellers when the items are purchased. The particular sample used in the survey cited many non-market sources and among market sources, occasional sales of the yard sale variety were mentioned very little. Again the convenience sampling invalidates quantitative results for the most part.

Of 121 usable surveys when the question was asked about the types of goods "that are now yours," but were "once owned by someone else," the following categories (liberally defined) received at least ten mentions.

1. clothes

2. jewelry, including wedding rings
3. books
4. furniture (most frequently mentioned, 67 times)
5. records, tapes, recordings
6. plants
7. childrens clothes (parents consider they "own" them apparently)
8. autos
9. pets
10. real estate (gifts and purchases)
11. office furniture, equipment
12. TV, radios, stereo, VCR
13. sporting equipment
14. china, silver, serving pieces
15. kitchen appliances (major and minor).
16. guns
17. recreational vehicle (motorcycle, boat, RV trailer)
18. various collections (stamp, coin, doll, etc.)

Curiously, few mentions were made of garden equipment, bicycles, tools, pictures and bric a brac for decorating, religious artifacts or books, and games. This may simply reflect the urban sample of graduate students. A majority of these product groups were significant to yard sales as well. Certain qualitative differences within the 18 groups above are obviously different when comparing yard sales to second hand goods generally. Very expensive items were cited as gifts or heirlooms more than from yard sales. Products were sometimes described as being from someone in particular (mother, a friend, husband, etc). Absolutely no real estate, recreational vehicles, or autos were obtained from yard sales.

In identifying objects as second hand, there is certainly some traditional cultural attachment to the usual categories and some that do not appear at all. Gifts of food are certainly frequent, but they are not stored long or at all (cooked and served food). When a home is inherited, the recipient may not identify all the furnishings and landscape material, much less the laundry equipment and kitchen supplies. A gift of chewing gum or a pencil is not noteworthy. Gifts of money or securities, life insurance benefits, pensions, or the care of an adopting grandparent are not likely to be revealed or thought relevant to a survey about secondhand goods. They were asked, "How were they obtained?", the major mentions were (liberally

3. Buyers enter the occasional market seeking very low prices.
4. Buyers do not search for desirable occasional market.s

These statements may prove true for some types of occasional markets and not for others.

While current markets can be studied with useful results likely to be obtained for improving them in the future, there may be justification for some study of alternative occasional markets or changed market operations. The amateurish and incompetent operators of such markets, it could be argued, need to be trained or replaced with those who can serve markets better. This line of reasoning would occur to those knowledgeable of retailing practices in the traditional business sectors of the economy because yard sale entrepreneurs collectively do not appear to have basic marketing skills.

A middle ground is more likely. Occasional sales are not likely to be perceived totally by consumers against the standards they apply to traditional retailers. Expectations will be lower no doubt because yard sale and other occasional market operators do not have resources to offer the variety, warranties, credit services, and shopping conditions of store merchants at a temporary open-air sale of miscellaneous goods.

There are however some methods that can no doubt be improved upon within the limits of the occasional market. Pricing, advertising and promotion, and site location and conditions can be altered by the smallest seller. Joint ventures (fairs, flea markets, neighborhood sales, etc.) can improve the success of the operators acting only individually. There is room for experiments in serving consumers better and increasing the success of the sellers. There is a literature of books and articles available to those who seek them.



If your program does come under fire, circle your wagons. Maintain effective internal communications regarding conditions, developments, strategies, and possible alternative plans for the future under various assumptions regarding possible developments. Maintain internal cohesion; stick together; the time to deal with internal differences is when peace prevails. Efforts to sustain the enterprise add to the unit's workload, and the on-going work is inevitably done under conditions of additional uncertainty and stress; the frictions that can develop under such conditions must be avoided. An entity that is plagued by disunity or disarray will likely not come through a serious challenge intact. Stand your ground together in a firm, positive manner.

If it becomes essential, call in the cavalry; get support from clientele -- students, parents of students, alumni, advisory boards, employers of graduates, extension program participants, supporters from other units on campus. Direct contacts, letters, and calls to decision-makers may prove helpful to your cause. It is very useful in mustering a counter-attack to have maintained a list of names, addresses, and telephone numbers of graduates, satisfied employers of graduates, and other supporters of the program. Again, such support may be more helpful if it is evidenced regularly before a battle starts than after your program has come under fire. Proactive is better than reactive.

Finally, negotiations for a peaceful settlement may call for steps toward program improvement of various kinds to insure continued program existence. You may need to be open to taking such steps if they are consonant with program philosophy and increased viability.

All concerned must recognize that implementing strategies for warding off or winning conflicts requires commitment of time and energies; it does not happen by itself. The productive work of the unit must go on, even while some of the productive capacity is absorbed with guarding the enterprise against pillagers. Everyone in a unit can make a contribution to this cause, but those whose role it is to make the primary commitment must have the support of the others as they devote their attention to the strategizing, networking, palavering, negotiating, and leading the charge to keep the enterprise intact and healthy.

What, if anything, can a professional association and professional peers do for a program under siege? Appeals, testimonials, or pressure brought to bear on your institutional decision-makers will, in most cases, not have much, if any, impact on decisions regarding your program. But there are contributions that would seem to be useful. The services of our professional association should in various ways stimulate members into creating the most productive, viable programs possible; building such strength -- establishing invulnerability -- is the primary defense a program can have. A specific action our association might take is to develop a document that articulates the nature, philosophy, and importance of our field, and the consequences that result from diminution, dilution, or destruction of our academic programs. Such a document might prove very useful in helping to educate our institutional administrators regarding our field, and thus to gain their appreciation for what we are and do, and their support for our programs.

Federation of America, Nader's Raiders, and consumers affairs departments of corporations. Consequently, they cannot and will not support us politically.

If you want ample evidence of this last point, ask yourself whether the programs of these groups would be seriously affected if Consumer Economics departments did not exist. Each of these groups and agencies turn primarily to business schools, law schools, economics departments, and engineering schools when they need academic help. Few of these agencies would grieve our passing and some would not even realize we had passed away.

Two other forces are working to our disadvantage. The first is that land grant universities countrywide are struggling with the philosophy expressed in the Morrill Act.<sup>2</sup> To the extent that the land grants are jettisoning the land grant mission, applied client-centered fields such as ours, where extension is important, are in grave jeopardy. The second is that the rise of the junior and community college systems in every state provide state universities with stiff competition for both students and as research and extension agencies in service to the people of their communities.

So much for Christmas Present. What about Christmas Yet To Come. I will be brief. I have yet to meet a senior administrator of a university or a member of a university board of trustees willing to sacrifice the quality of the parent disciplines in favor of an applied, multidisciplinary field located anywhere other than in medical schools, business schools, and engineering colleges. So, I am not optimistic. Consequently, I believe that the field will be lucky if there are four stand-alone departments with strong undergraduate and graduate programs left in the country in the year 2,000. The rest will have been merged with departments of agricultural economics, human development and family relations, and in a few cases with retailing departments. This process is already far along. Most of us, provided we are tenured, will not reside in consumer economics departments. We will be in small sections of other departments. Many of us are already. For the most part, our colleagues in those departments have agendas other than ours. Consequently, it will be very difficult to maintain our strength over the long-run. Indeed, part of our present problems arise from the difficulties we face trying to survive and grow as

minority interests in larger departments.

Will my Christmas Yet to Come arrive despite our best efforts at redemption? I hope not. Scrooge began by hailing a boy and having him deliver the prize turkey to the Cratchits. There are few boys waiting to do our bidding and we don't have access to many prize turkeys. There are, however, some things we can do. These are of a short- and a long-run nature.

In the short-run, we can support each other in our times of fiscal troubles. Well-timed letters to presidents, vice-presidents, members of boards of trustees, and even to selected politicians in support of our programs will help. For instance, we at Cornell are under siege by our Provost who wants to "rationalize" economics and in the process shrink or eliminate Consumer Economics. At some point, I may need you to write letters to him telling him how valuable we are. In the short-run, too, we can garner and organize what support we have in each of our states. Finally, our students can be persuasive ambassadors on our behalf. Hence, we should make sure that we teach as well as we can. In all of this we should be pro-active rather than defensive.

In the long-run, I believe we must become useful to groups and agencies who have political strength in our states and nationally. By useful, I do not mean doing or saying what we do not believe. Rather, I mean, producing high quality research, extension, and adult education programs which speak to the needs of our states' attorneys-general, CFA, AARP, Consumers' Union, and the federal and state agencies like the FTC, FDA, and CPSC, who regulate and run programs in the consumer interest. We have always been good at serving individual consumers and families. Now, we have to learn to be good also at serving the larger groups and agencies that serve consumers and families. Last but not least, we must be relevant to corporate consumer affairs departments. One way to do this is to produce students who can improve the quality of these agencies as employees. Another way is to mount training programs for consumer affairs managers and employees that will have them clamoring for more.

There are three purposes to be served in my long-run strategy. The first is to develop good relationships with groups and agencies who can and will speak on our behalf when budgets are

## Proposed Elimination of the Consumer Economics Program at the University of Maryland

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University of Maryland

The program in consumer economics at the University of Maryland is in the Department of Textiles and Consumer Economics in the College of Human Ecology. A University Committee has proposed the elimination of the Department and its programs and the University Senate will act on the recommendation in Spring, 1992. The College of Human Ecology played a major role in this development. Initially there were four departments in the College. However, a 1985 campus re-organization resulted in the transfer of one of these departments to another College. In the Summer of 1991 the University of Maryland at College Park faced serious budget problems and a large scale investigation of colleges, departments and programs on the College Park Campus commenced. Low priority programs were at risk. The College of Human Ecology was identified for possible elimination and a College Committee was appointed to examine possible future locations for departments, programs and faculty in the College. At this time, faculty in the Department of Human Nutrition and Food Systems, which was in the College of Human Ecology, expressed an interest in moving to the College of Agriculture. It then became necessary to find a home for the two remaining departments in the College, one of which was the Department of Textiles and Consumer Economics. Unfortunately, it was not possible to find an academic home for this department in other multidisciplinary Colleges on the College Park Campus. Thus, TXCE department and its programs were recommended for elimination.

There were two major issues that were never considered by the College Committee and the University Committee in their deliberations. First, the issue of whether there should be a College of Human Ecology was never addressed. Rather the College Committee was asked to consider where programs and faculty might be relocated in the event that the College were eliminated. Second, the issue of whether there should be programs in textiles or consumer economics was never

addressed. Instead, it was left to faculty in the TXCE department to find an academic home for their programs. Unfortunately, the faculty were not united in this endeavor and some faculty saw greater professional opportunities for themselves in the event that the department and its programs were eliminated. This created problems for the majority of the faculty who were attempting to find a new academic home for the TXCE department and its programs. Failure to find a home meant that the department and its programs were recommended for elimination. This type of decision is a default decision and lacks academic justification since the Department of Textiles and Consumer Economics has the strongest academic programs and the greatest number of undergraduate and graduate students in the College of Human Ecology. However, the interests of faculty, students, and alumni, who were committed to the department and its programs, received little consideration. One administrative explanation for the proposed elimination of the TXCE department may be the fact that it has several nontenured faculty and several senior faculty who may retire in a few years. Such potential resources are attractive in the continuing budget crisis which faces the College Park Campus.

numbers of female students). UNH has begun a concerted effort to attract more minority faculty and students, and to work toward hiring more female faculty in traditionally all-male departments. The Family Studies Department probably has the most balanced and integrated faculty of any department in the university: five females and four males; two minority faculty, both in the consumer studies area.

In the meantime, we are proceeding with several initiatives which we hope will convince the powers-that-be that this is a worthwhile endeavor. (These discussions began before the review.) The administration is interested in linking the university community and programs to the community. We hope our efforts along this line will be fruitful in more ways than one.

What is to be done? First of all, hope you never get into a situation where you are fighting for your professional and programmatic identity without knowing why you are having to fight! Solidify community contacts by developing programs which call on these resources as much as possible. "Schmooze" with the important people as much as possible. If your university sponsors a "Legislators Day" as UNH does every year, invite legislators to your classes. Do whatever you can think of now to inform people about your strong, vibrant, and relevant programs.

In these economically troubled times at universities, we all need to learn not to hide our lights under a basket. Administrators need to be taught to appreciate what our discipline can add to the student's academic experience.

traditional way and the non-traditional way.  
Distance education is not the poor cousin of on-  
campus education.

12. How is undergraduate employment related to course load and the number of semesters needed to complete a baccalaureate degree?

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These organizations balance sheets have consisted of assets which were traditionally in the residential housing market and liabilities from the household sector, often at competitive rates. These organizations have been more successful in the retail market than the new foreign banks because they had well established branch networks prior to deregulation.

The old State banks are now beginning to disappear. They are being taken over by either other state banks (Tasmania and South Australia); the government banks (Victoria); or put out to tender (NSW and Western Australia).

This means that any expert system for use by consumers has to cover about 10 banks within each state of Australia to cover the retail market.

Ten banks have been surveyed once each of the last four years, representing approximately 96 % of the market. The other three to four percent is relationship banking provided by foreign banks to very high net worth customer.

#### The System

The system is user friendly. It uses the data over the survey period of the individual banking profile of the consumer it converts their choice or choices of products into effective interest rates. Because the fee structure varies infrequently it is not necessary to update on a weekly basis, generally interest rate movements preserve the ranking of the products and the ranking is only changed by annual fee movements.

#### The Uses - Consumer and Researcher

Because the same banks have been used in the survey over the four year period the data can be used to analyze the impact of changes in fee structure and access to the clearing and electronic payment system. It will also identify policy changes by banks.

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Responses to this question were also used to derive a set of poverty thresholds on the assumption that the responses were accurate reflections of household food sufficiency (Blaylock and Smallwood, 1986). The resulting poverty thresholds were rather close to those currently in use by the U.S. Government. Expanding on the work by Blaylock and Smallwood, Blaylock (1987) used responses to the food sufficiency question to derive food plans that compare favorably to those currently in use by the U.S. Government. Despite these positive findings it remains unclear as to whether self-reported food sufficiency is an accurate reflection of "true" household food sufficiency. An indirect way to examine the validity of this food sufficiency indicator would be to test whether self reported food sufficiency status is in agreement with food consumption behavior revealed prior to reporting food sufficiency status.

The purpose of this study was to test the hypotheses that households describing their food supply as not sufficient have higher income elasticities for food expenditures and for the aggregate commodity "Food," as measured by food energy or calories consumed by the household; and to obtain estimates of income elasticities for food energy price/quality for each food sufficiency category and compare them. Rejection of these hypotheses may cast doubt on the validity of self-reported evaluations of household food supply as an accurate descriptor of the household's true food sufficiency status. On the other hand, failure to reject these hypotheses is not sufficient to guarantee the validity of self-reported food sufficiency (but may encourage further research on the subject). This is because the objective rests on the underlying assumption that as household resources become more and more limited, households reduce expenditures on food (and on other commodities) by consuming lower priced varieties of food while maintaining a reasonably constant amount of food energy in order to maintain body weight and health. Substantial reductions in the quantity of food energy consumed may follow exhaustion of price/-quality reduction possibilities. It is thus expected that households which truly do not have sufficient food supplies (whatever the definition of food sufficiency) will have, on average, higher income elasticities for food costs or expenditures, and food energy than other households. They will have

lower price/quality elasticity if their food energy consumption is restricted; otherwise, they are expected to have a price/quality income elasticity similar to that of households with sufficient food. The converse reasoning need not hold, however. That is higher income elasticities for food expenditure, and energy, and lower price/quality income elasticity, do not necessarily imply not sufficient household food supplies.

The analysis entailed the following steps:

- I. Utilizing household data from the 1977-78 NFCS, and dividing the sample into three food sufficiency categories of households. A household was classified as not having sufficient food supplies if the response was "sometimes not enough to eat" or "often not enough to eat;" having marginally sufficient food supplies if the response was "enough but not always kind wanted to eat;" and a household was classified as having fully sufficient food supplies if the response was "enough and the kind wanted to eat."
- II. Estimation of double-log unrestricted reduced form equations for food costs, food energy available to the household, and price/quality of food as functions of household income, size, and other household characteristics available from the NFCS for the food sufficiency categories using appropriate statistical methods;
- III. Comparison of income elasticities thus obtained and drawing of conclusions.

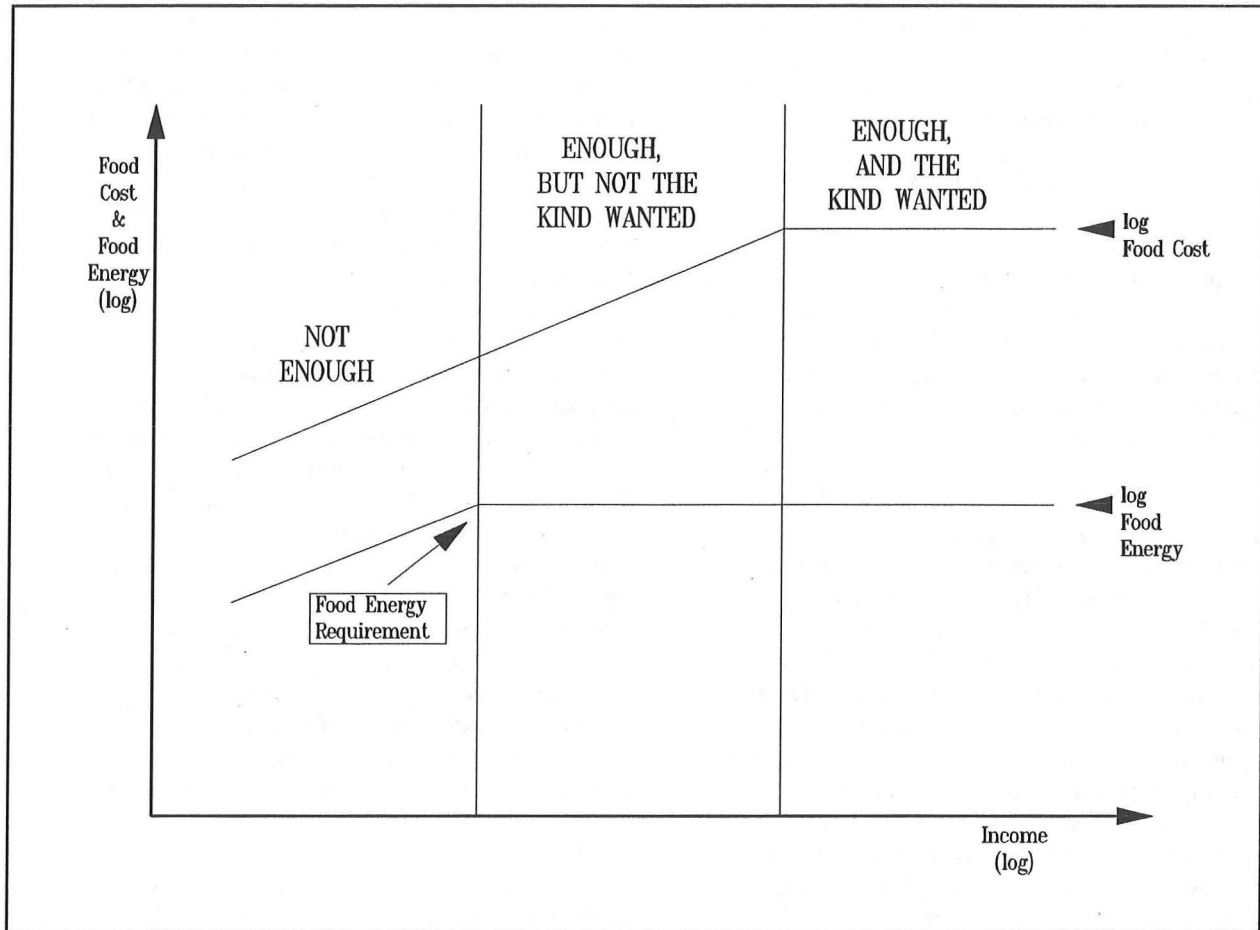
The results may be of interest to consumer economists, data collecting agencies, Federal food assistance program planners, the academic community, and the public at large.

## Methodology

### Model Development

In demand estimation with cross sectional data the assumption is usually made that there is little or no price variation (Capps and Havlicek, 1984; Cox, Ziemer, and Chavas, 1984; Purcell and Raunikar, 1971). Whatever price variation there is, it is

Figure 1.  
The Food Sufficiency Curve



energy. Beyond the point where the household starts reducing the amount of food energy consumed, one would expect any increments to household food expenditures to be devoted to purchasing higher amounts of food energy.

Since this assumption appears reasonable, it can be used to examine the validity of the food sufficiency question in USDA's dietary surveys: If households reporting their food supplies as insufficient truly have insufficient food supplies, they should be reacting to changes in economic resources (income) as described above. The economic concept of choice in describing food consumption behavior is that of elasticity. To

illustrate these concepts, refer to figure 1. If, for simplicity, the logarithmic scale is assumed, then the slope of the "Food Energy" curve in figure 1 represents the income elasticity of food energy consumed. If the hypothesized process described above is valid then "sufficient" food households should exhibit a flat slope for (log) food energy as a function of (log) household income. "Not sufficient" food households, on the other hand, should be characterized by a positive (log) food energy slope (elasticity) as a function of (log) household income. Similarly, "fully sufficient" food households should be characterized by a flat food cost or expenditure slope as a function of (log) household income. "Marginally sufficient" and "not

Table 1.  
Weighted Means of Key Variables by Food Sufficiency Status

	Income Last Month per Person per Week	Weekly Food Cost per 21 MEP	Household Weekly Food Energy Consumed per 21 MEP	"Price:" \$'s per 1,000 Kcal Consumed by Household
Enough and the Kind Wanted (N=1,306)	\$46.11	\$16.64	21,092 Kcal	\$ .81
Enough but Not the Kind Wanted (N=1,144)	\$38.38	\$15.58	21,327 Kcal	\$ .75
Not Enough (N=297)	\$30.78	\$14.70	20,679 Kcal	\$ .73

Table 2.  
Estimated Household Responsiveness to Increases in Household Income and Expenditures

	Estimated Household Responsiveness to Increases in Household Income			Estimated Household Responsiveness to Increases in Household Food Expenditures	
	Estimated Income Elasticities (and P-Values)			Estimated Expenditure Elasticities	
	(1) Food Cost	(2) Food Energy	(3) Price/Quality	(4) Food Energy (2)/(1)	(5) Price/Quality (3)/(1)
Enough and Kind Wanted	0.02 (p=.24)	0 (p=.93)	0.02 (p=.03)	0	1
Enough but Not Kind Wanted	0.12 (p=.0001)	0.04 (p=.16)	0.08 (p=.001)	0.33	0.67
Not Enough	0.19 (p=.0003)	0.12 (p=.02)	0.07 (p=.005)	0.63	0.37

are highly significant, e.g., significant at the 0.01 level.

### Results

Due to space limitations only results on key variables and income elasticities will be discussed herein. Results for the remaining variables

included in the model are available on request. Estimated means for income, food costs, food energy, all per 21 MEP, and the food energy price/quality variable by self-reported household food sufficiency category are shown in Table 1. (These means were weighted by the appropriate sample weights so that they are representative of the food stamp program eligible population for the

households spent all of the increase in food expenditures on buying the same amount of food energy but from more expensive sources.

- o In practical and dollar terms, out of a one dollar (or approximately 2 percent) increase in weekly at home food expenditures per 21 MEP, "not sufficient" food households would spend 63 cents on buying more food energy and 37 cents on buying more expensive sources of food energy; "marginally sufficient" food households would spend about 33 cents on buying more food energy and 67 cents on buying more expensive sources of food energy; and "fully sufficient" food households would spend the entire one dollar increase on more expensive sources of food energy.

Because households may assign themselves into a food sufficiency category according to some factor(s) unavailable in the data set, a test for selectivity bias was performed using a two stage method in a switching regressions framework (Maddala, 1983, pp. 223-228; Nelson, 1984). The selectivity variable coefficients were not significant. All of the selectivity adjusted estimated income elasticities corroborated and enhanced the previously estimated elasticity differences among the three food sufficiency groups. As the results based on no selectivity adjustment were more conservative they were discussed here.

Finally, additional analyses of the total NFCS and food stamp eligible samples using the semi log functional form resulted in similar findings. With the possible exception of the selectivity bias adjusted estimated elasticities, these estimates are quite robust.

### Conclusions

The results of this exploratory analysis suggest that food stamp program eligible households in the 1977-78 NFCS survey reporting their food supply as not sufficient were estimated to adjust their food energy consumption behavior more drastically in response to a small change in income than did

households describing their food supply as marginally or fully sufficient. This finding is important for two reasons. First, the study shows that self-reported household food sufficiency could be an accurate measure of true food sufficiency, although its validity is not assured by this study. A second point, not previously discussed, is that, in the 1977-78 NFCS the food sufficiency question was asked after questions pertaining to food assistance program participation. This might have biased the household's reported food sufficiency status toward the "not sufficient food" category. Since data on household food use were collected at the beginning of the interview, the results of the study suggest that, on average, the placement of the food sufficiency question on the questionnaire did not result in substantial biases toward the not sufficient food category.

Presently, a similar analysis is under way using the recently released Household Portion of the 1987-88 NFCS. Preliminary results support these conclusions. However, more research is needed from the perspectives of several disciplines on the potential of self-reported food sufficiency as an accurate indicator of true food sufficiency before it can be used with confidence.

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## An Analysis of a Food Demand System for the United States

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This study provides estimates of a complete demand elasticities matrix for 19 food categories in the United States, using the linear approximate almost ideal demand system (LA/AIDS). Estimation is based on monthly data created from household data in the BLS's consumer expenditure diary surveys during 1980-1986. Among other findings, demand for milk is shown to be elastic with respect to price and inelastic with respect to total food expenditure; it is positively related to household size but negatively related to age of household. The estimated compensated cross-price elasticities are used to analyze substitution patterns among food items for at home and away from home consumption.

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### Introduction

Consumer demand for food is a critical component in the economic analysis of agricultural policies and social welfare programs. Understanding the structure and pattern of food consumption is essential for designing and assessing food and agricultural programs and policies. For example, the estimated price and income elasticities of food demand provide important information for assessing the impacts of government price support, income maintenance programs, and the food stamp program. Other policy areas in which the estimated demand elasticities and projection of consumer demand could be useful include structural analysis and strategic planning by the food industry.

Demographic and socio-economic characteristics of the U.S. population which may affect food consumption have changed significantly in recent years. The important changes include the declining rate of growth of population, the composition of age, and size of households, the increasing labor force participation of women, and the racial mix of the population. In addition, increasing nutrition and health concerns may have, as claimed by many researchers, changed food consumption patterns in the U.S.. These claims have been based on the fact that there have been substantial decreases in per capita consumption of red meat and eggs during the last two decades. These and other changes in food consumption pattern have major implications for the food industry, especially if these changes continue into the future.

The purpose of this paper is to apply the LA/AIDS to analyzing the demand for food commodities in the United States. The outline of the paper is as follows. Data sources and data construction are first described. A flexible demand system of the PIGLOG type is specified and demand parameters are estimated. Finally, the key estimated elasticities of 19 food categories are presented.

### Data Sources

Three major components in any demand model include expenditure, prices, and socioeconomic (and/or demographic) variables. The characteristics of available data series for these three components

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$c_i'1=0$  for all  $i$  leads to the AIDS model. These restrictions can be tested to assess the adequacy and relative explanatory power of the AIDS and TL for a particular data base.

For empirical applications, the AIDS has often been estimated using a simple linear approximation to avoid nonlinearity of the system (see, e.g. Deaton and Muellbauer 1980). This approximation essentially amounts to replacing the term  $d+a'V+0.5V'cV$  in Eq. (1) with some mechanical price index such as the Stone index defined as  $\log P^* = \sum w_{jt} \log(p_{jt})$ . Deaton and Muellbauer (1980) note that in most cases the approximation is fairly close, particularly if wide variations in prices do not occur in the sample period. Anderson and Blundell (1983) also provide evidence that the use of a Stone index has little effect on the value of the log likelihood function. Other studies have noted similar results especially in the area of food demand estimation Blanciforti, et al. (1986).

An initial attempt was made to estimate the original version of the Lewbel's general form and AIDS. But this formulation failed to converge after 300 iterations. Consequently, we follow others in using the Stone index as an approximation to the term,  $d+a'V+0.5V'cV$ , in the original specification. In order to avoid the simultaneity problem, Stone's index is computed by using the lagged budget shares as suggested by Eales and Unnevehr (1988), that is,  $V^* = \log P^* = \sum w_{j,t-1} p_{j,t}$ .

In order to incorporate the impacts of demographic variables into the system, we follow a demographic translating procedure developed by Pollak and Wales (1981). Accordingly, the parameters  $a_i$  are specified as a linear function of the household characteristics variables,  $D_h$ :

$$a_i = a_{i0} + \sum_k a_{ik} D_h \quad (3)$$

Two demographic variables, household size and age of household head, are considered in this analysis. The other demographic variables can not be averaged across households on a monthly basis.

Many researchers argue that demand models

should incorporate or test for dynamic behavior of consumers. In fact, several previous demand studies including Blanciforti, et al. (1986) and Yen and Chern (1992), have shown that a dynamic form of a demand system provides a better approximation to consumer behavior than a static formulation. The dynamics are often assumed to reflect persistence in consumption pattern and to capture the changes in taste over time. Several alternative approaches have been used to incorporate dynamic factors of consumer behavior into model specification (see, Johnson et al. 1984). In this study, a lagged quantity variable ( $Q_{t-1}$ ) is included to capture the impacts of persistence in consumption pattern and/or changes in taste over time.

Consequently, using Stone's index and incorporating the demographic variables as well as the dynamic specification, the share equations, Eq. (1), can be extended and expressed as:

$$W_i = [a_{i0} + a_{i1} Q_{t-1} + a_{i2} D_1 + a_{i3} D_2 + b_i V^* + c_i' V - (c_i' 1 + b_i (1 + V'cD)) Z] [1 + V'c1]^{-1} \quad (4)$$

where  $V^*$  is Stone's index. The adding-up restriction requires that  $\sum a_{i0} = 1$ ;  $\sum a_{i1} = 0$ ;  $\sum a_{i2} = 0$ ; and  $\sum a_{i3} = 0$ . Eq. (4) is termed the Lewbel's full model or simply the full model in this study.

Preliminary estimation of Eq. (4) for 19 food commodities in one stage reveals that the system is too large to handle. It would be an unmanageable task to estimate the full model due to nonlinearity in estimation. The only possibility for estimation of a system for 19 commodities in one stage is to restrict  $c'1=0$  to avoid the troublesome problems associated with nonlinear estimation. This imposition of  $c'1=0$  in the Eq. (4) reduces the model to a linear approximation AIDS (LA/AIDS). This restricted version of Eq. (4) can then be rewritten as:

Alternatively, one may aggregate 19 food groups to form fewer subgroups such as meat, poultry and fish and estimate a two stage model. This

people.

(7) Poultry and seafood appear to have strong positive age elasticities. This may be due to the fact that elderly families tend to have more health concerns than younger families.

Many previous demand system studies concentrated only on the estimation of own-price and expenditure elasticities and paid little attention to interdependent relationships among commodities in the system. One possible reason for this lack of attention is that it is very difficult to evaluate the plausibility of the estimated cross-price elasticities. Theoretically, the cross-price elasticities can be positive or negative. There are no expected signs. However, one main merit of a system approach is to permit us to systematically analyze the substitutability and complementarity among commodities in the system. Formulating a complete elasticities matrix will be useful for analyzing food consumption pattern and consumer behavior.

Table 2 presents the compensated price elasticities for 19 food commodities. The compensated price elasticities are computed from uncompensated price elasticities, expenditure elasticities and budget shares. The definition of substitutability and complementarity in the Hicksian sense is based on the sign of the total compensated substitution effect including specific and general cross-price effects for a given level of utility. If a compensated cross-price elasticity,  $\eta_{ij}^*$ , is positive, then a rise in the absolute price of j-th commodity would cause consumption of i-th commodity to increase, holding utility constant. Accordingly, goods i and j are said to be Hicksian substitutes (complements) if  $\eta_{ij}^* > 0$  ( $< 0$ ).

The main findings from the estimated compensated price elasticities for the 19 commodities are summarized as follows:

(1) Cereal has strong substitute relationships with other meats (1.94), seafood (1.25), and dairy products (1.49) and has a complementary relationship with milk (-2.95).

(2) Bakery products appear to have fairly weak relationships with other commodities in the system.

The compensated cross-price elasticities range from 0.4 with respect to food away from home to -0.07 with seafood.

(3) Among three red meats, the estimates of compensated cross-price effects show that they are substitutes. For instance, quantity demanded for beef would increase by 0.15% for a 1% increase in pork price, and by 0.35% resulting from a 1% increase in the price of other meats. Pork quantity demanded would increase by 0.27% and 0.60%, respectively, due to a 1% increase in the prices of beef and other meats. In addition, a 1% increase in the price of beef and pork could result in increases in the quantity demanded for other meats by 0.89% and 0.87%, respectively.

(4) Poultry is found to be a substitute for beef, pork, and seafood but a complement for other meats. The results also show that poultry and dairy products have a relatively strong complementarity relationship and, similarly, poultry and food away from home.

(5) Seafood has a negative compensated cross-price elasticity with respect to beef and pork, indicating complementarity with these two red meat products, but seafood is a substitute for other meats. We also observe that the relationships between seafood and cereal, as well as between seafood and milk, dairy products, and food away from home indicate they are substitutes. A 1% increase in the prices of food away from home and or of cereal would result in 1.51% and 1.71% increases, respectively, of the quantity demanded of seafood.

(6) Eggs and milk, as well as eggs and other dairy products are found to be substitutes, but eggs and food away from home are complements. Cross-price estimates between eggs and beef, other meats, poultry, seafood do not show significant interdependent relationships.

(7) The cross-price elasticities from milk and dairy products indicate that the two commodities are substitutes. The relationship between milk and cereal, as well as relationships between milk and food away from home indicates they are strong complements. The results also indicate that the dairy products group has significant interdependent

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Table 1  
Estimated Elasticities of 19 Food Categories.

Item	Own Price	Expenditure	Household Size	Age <sup>a</sup>
Cereal	-2.19	0.97	0.25	0.08
Bakery	-0.89	1.00	0.01	0.18
Beef	0.24	0.72	0.63	-1.49
Pork	-0.64	1.05	0.50	0.10
Other				
Meats	-2.74	0.86	0.22	-0.40
Poultry	-0.42	1.17	-0.03	0.67
Seafood	-2.14	0.51	0.26	0.72
Eggs	-0.17	1.04	-0.03	0.45
Milk	-0.99	0.79	0.20	-0.19
Other				
Dairy	-0.60	0.77	-0.02	0.12
Fresh Fruit	-1.05	0.95	0.00	0.24
Fresh				
Vegetables	-0.71	1.01	0.39	-0.17
Processed				
Fruits	-1.99	1.06	0.25	0.48
Processed				
Vegetables	-0.75	1.00	0.47	0.15
Sweets	-1.43	1.28	0.41	-0.15
Nonalcoholic				
Beverages	-1.18	1.04	0.00	0.33
Fats & Oils	0.10	0.83	0.20	-0.08
Misc. Foods	-0.80	1.14	0.47	0.06
FAFH <sup>b</sup>	-0.39	1.08	-0.47	0.09

<sup>a</sup> Age = age of household head.

<sup>b</sup> FAFH = food away from home.



## Aggregate Consumption and Economic Behavior

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Because aggregate variables are weighted averages, aggregate consumption theories actually represent household behavior on the basis of their relative shares of spending and income. Since these shares are unequally distributed, the theories are biased towards high income and against low income households. Using BLS cross sectional data, consumption functions are estimated with controls for distributional and transitory influences. Results strongly suggest that aggregate behavior is time invariant and, when appropriately specified, household and historic models yield similar descriptions of spending behavior.

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### Historic and Household Consumption

After Keynes' (1936) original formulation, perhaps the pivotal event in studies of aggregate consumption was the finding that spending behavior seemed to depend on how spending was measured, that is, marginal propensities to consume estimated from long run historical data were significantly larger than those found using cross sectional household survey data (Thomas, 1989; Spanos, 1989). Efforts to explain these inconsistent results led researchers away from Keynes' notion that current consumption depended on current income and towards the idea that spending depended on income derived over a longer period of time, usually as the present value of past or future income (Brumberg and Modigliani, 1954; Friedman, 1957).

While the proper theory of consumption has yet to be resolved, differences between long run and cross sectional marginal propensities to consume are actually based on a fundamental misperception. Following the empirical work of Kuznets (1946) and Friedman (1957) using national income data, the historic consumption function is usually expressed as a constant function of income:

$$(1) \quad C_t = kY_t; \text{ where } t = 1 \dots m \text{ years.}$$

On the other hand, household consumption functions derived from cross sectional data uniformly indicate that low income households dissave and high income ones save, implying a function with a positive intercept (Friedman, 1957):

$$(2) \quad c_i = a_i + b_i y_i; \text{ where } i = 1 \dots n \text{ households}$$

Although these functional forms seem to describe different types of spending behavior (hence concern about the proper theory of consumption), they are actually related through aggregate consumption. In any year, aggregate consumption is the sum of individual household spending,

$$(3) \quad C_t = c_1 + \dots + c_n$$

By substitution,

$$(4) \quad C_t = a_1 + b_1 y_1 + \dots + a_n + b_n y_n.$$

Multiplying and dividing each right hand side component by  $Y_t$  and setting each household's relative share of income  $y_i/Y_t$  equal to  $w_i$ , then

$$(5) \quad C_t = a_1 + \dots + a_n + b_1 w_1 Y_t + \dots + b_n w_n Y_t; \text{ with } \sum w_i = 1;$$

$$= \sum a_i + \sum b_i w_i Y_t.$$

This implies that the historic MPC equals the income weighted average of the household mpc's,

$$(6) \quad k = \sum b_i w_i$$

and that the simple regression of household consumption on household income is irrelevant when comparing household and historic spending behavior.

For example, suppose in some year the economy is composed of two households with consumption and income as follows:

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Department of Economics

	$c_i$	$y_i$	$b_i$	$w_i$	$b_i w_i$
Household A	30	20	1.50	.20	.30
Household B	<u>60</u>	<u>80</u>	<u>.75</u>	<u>.80</u>	<u>.60</u>
Total	90	100	.90	1.00	.90

Total spending and income of both households produces the familiar historic consumption function,  $C = .9Y$  while cross sectional spending implies a household consumption function,  $c = 20 + .5y$ . Plots of these two functions will show the familiar long run/cross sectional dichotomy of sharply different household and total average propensities.

Now suppose consumption and income change as follows:

	$c_i$	$y_i$	$b_i$	$w_i$	$b_i w_i$
Household A	156	80	1.95	.40	.78
Household B	<u>24</u>	<u>120</u>	<u>.20</u>	<u>.60</u>	<u>.12</u>
Total	180	200	.90	1.00	.90

This does not alter the historic consumption function but now the household function becomes  $c = 420 - 3.3y$ . Clearly cross sectional and long run spending behavior are not directly related. A stable historic consumption function is consistent with any type of household spending; distinctions between behavior implied by one function with that implied by the other are meaningless.

#### Representative Behavior

While dichotomous behavior is not necessary to explain long run and cross sectional spending differences, nonetheless the idea that households spend according to permanent or life-cycle measures of income dominate modern theories of aggregate consumption.<sup>1</sup> By their specification, these theories ignore cross sectional data and rely on historic data for calibration and validation. Since aggregate data is compiled by summing across all households, it represents total rather than "typical" or "average" behavior. To model individual behavior, a theoretical construct is utilized in which "the totality of various individual households (is) treated as if it were a single 'representative' household" (Intriligator, 1978: 235). Although the representative concept is exceedingly convenient by permitting single observations to represent millions of households, it fundamentally alters the meaning of economic

behavior.

In any year, aggregate income is simply the sum of individual income,

$$(7) \quad Y_t = y_1 + \dots + y_n$$

Multiplying and dividing the right hand side through by  $Y_t$  and setting  $y_i/Y_t = w_i$ , as before,

$$(8) \quad Y_t = w_1 Y_t + \dots + w_n Y_t, \text{ where } \sum w_i = 1.$$

Aggregate income is a weighted average of the income of individual households and since the same conclusion applies to aggregate consumption by similar argument, the representative theories actually represent the behavior of households on the basis of their relative shares of spending and income. Since neither are equally distributed, these theories are biased towards the activities of high income households and against those of low income ones.

Table 1  
Distribution of Consumption, Income & Households by Income Level

Income Level	1980-81			1986-87		
	%C	%Y	%Hd	%C	%Y	%Hd
< 5000	6.5	2.0	14.4	5.3	1.0	10.8
5-10,000	10.0	6.7	16.2	8.0	4.7	15.7
10-15,000	11.4	9.6	14.7	8.7	6.3	12.7
15-20,000	12.3	11.8	13.0	8.3	7.0	10.3
20-30,000	24.9	26.2	21.4	17.0	16.1	17.1
30-40,000	16.8	19.3	11.5	15.3	16.5	12.7
40,000+	18.1	24.5	8.9	37.5	48.5	20.8
Total	100.0	100.0	100.0	100.0	100.0	100.0

Table 1 shows the relative distribution of consumption, income and households by income level from combined Consumer Expenditure Surveys conducted in 1980-81 and 1986-87 by the Bureau of Labor Statistics (1986,1990). Income, from all sources, is net of personal taxes while consumption includes all expenditures net of all nonhealth insurance, retirement and social security contributions. In 1980, about 42 percent of the households accounted for 70 percent of income and 60 percent of consumption; in 1986, 33 percent accounted for 65 percent of income and 53 percent of consumption. These percentages, reflecting well-known distribution figures going back fifty years (Bureau of Census, 1989), clearly indicate that long run aggregate consumption theories do not represent "average" behavior in the sense of mean

behavior.

The fact that aggregate measures of household behavior are unequally distributed among households has important implications. Programs formulated on the basis of multipliers and coefficients estimated with aggregate data could have unexpected results unless their prescriptions follow the prevailing distributions of the data from which they are derived. For example, in the first simple example discussed above, assuming equal average and marginal propensities, the historic consumption function suggests an income increase of 10 would increase consumption by 9. This implicitly assumes the increase follows the prevailing distribution of income with household A receiving 20 percent and B getting 80 percent. If the increase went entirely to A, consumption would rise by 15 while if it went to B, it would rise by 7.5. Thus, depending on how changes in income are distributed, changes in consumption could vary by 100 percent.

#### Transitory Behavior

In modern consumption function research, cross sectional survey data has been largely ignored because it produced results different than those from historical studies. Households are thought to have a smooth spending plan ( $c$ ), derived from long run expected or permanent income ( $y_e$ ). This plan implies a stable historic spending ratio  $b$  and that  $c/y_m = b$ . However, unanticipated events sometimes cause measured or income actually received ( $y_m$ ) to deviate from its expected value by some temporary or transitory amount ( $Y_t$ ). The situations where  $Y_t \neq 0$  imply that  $c/y_m \neq b$  because  $y_m = y_e + y_t$ . In other words, spending ratios differ across households because transitory incomes differ rather than because of different responses to income size and level. Since survey data includes different types of income which invoke different types of spending behavior, it should not be used to estimate consumption functions.

The rejection of entire datasets because some individual spending ratios reflect transitory situations seems extreme. A more reasonable procedure entails establishing a range within which differences between measured and expected income can be considered unimportant. Households with apcs outside this range must be experiencing

transitory income and can be controlled for in some manner when estimating a consumption function. This approach was not used by early researchers because they relied on grouped survey data which contained, at most, a dozen or so observations,<sup>2</sup> thereby making data adjustments impracticable or impossible (Bunting, 1989).

#### Household Spending Behavior

Before making decisions regarding intertemporal spending, households first have to resolve their intratemporal problem of choosing between consumption and saving. In the latter decision, they are constrained by income,  $y = c + s$ , and the desire to avoid death or deprivation,  $c \geq a$ , where  $a$  represents some minimal acceptable standard of living. For all households, these two constraints imply a Keynesian consumption function,  $c_i = a + by_i$ . At low levels of income, consumption will be some constant amount while at higher levels, households, not pressured by basic survival motives, can choose between spending or not according to the utility derived from each activity. Most likely the income consumption curve between consumption and saving is not linear as implied in the intertemporal analysis. Rather, at low incomes, savings is a luxury activity and consumption a necessity while at higher levels consumption becomes more like an inferior good and savings more a normal one.

Questions about choosing between saving and consumption in an intratemporal context as well as defining an "acceptable standard of living" involve a number of complex issues. Saving motives largely depend on the amount to be saved and the income of the saver. Low and middle income households probably save for the same reasons they demand money, for transactions and precautionary purposes. Reserves must be established for future obligations as well as for unanticipated expenditures. Additionally, there might be some saving to speculate on turns in the interest rate but the households involved are likely few. Higher income households might save for future earnings, an intertemporal reason, but following the law of variable proportions where consumption is increased against a fixed capacity to consume, savings would occur even at a zero interest rate.

As income falls to low levels, rather than allowing some fixed historic spending ratio to drive consumption to zero and themselves to death, households dissave. Dissaving should not be considered a minor activity or theoretical construct. During the 1980s more than 40 percent of households spent more than their current income (Bunting, 1991). This high percentage, which is consistent with expenditure survey results reaching back to the 1870s (Bureau of Census, 1975 (1): 320-328), indicates a strong survival instinct among all households.<sup>3</sup> While households do not follow a "death wish," precise delineation of an "acceptable standard of living" is difficult. Most likely the amount varies by income level, that is, what is acceptable at a low income level is different, and less, than that acceptable at a higher level. In other words, for some "rice and beans" is acceptable while for others "caviar and champagne" is necessary.

#### Data and Results

Two different BLS Consumer Expenditure Surveys are used to estimate household consumption functions. As national probability samples of household income and expenditure behavior, these surveys form the basis for determination and rebasing of the Consumer Price Index. The first survey, conducted in 1960 and 1961 contains responses from over 12,000 urban and rural households while the second, reflecting a shift from periodic annual to continuous quarterly surveys, was constructed from 1984 quarterly surveys. It includes annualized data for households for which at least one quarter of both income and expenditure data were available, about 9400 observations in total.

In each survey, household income includes, after deduction of personal federal, state and other taxes, total money earnings, social security and retirement income, interest and dividends, unemployment and worker's compensation, public assistance and food stamps, regular contributions for support and other income. Consumption expenditures include all forms of spending, including household durables, net outlays (cost minus trade) for new or used vehicles or boats, mortgage interest (not principal), gifts, cash contributions and so on. Excluded from spending

are contributions for social security, retirement pensions and life insurance (Bureau of Labor Statistics, 1971; 1986b).

To provide a basis of comparison, the traditional household model,  $c_i=c(y_i)$ , was first estimated in linear form using ordinary least squares and then reestimated after removing households with consumption or income less than or equal zero.<sup>4</sup> The results shown in Table 2 are consistent with existing estimates in that both the mpc and fraction of explained variation are much lower than those found with historic data. The exclusion of nonpositive households, which reduced both samples by less than 1 percent, had negligible effects.

Table 2  
Estimated mpc's, Original and Revised Samples.

Sample	mpc	t	N	R2
1960	.7702	219.1	13728	.7776
1960r	.7729	220.0	13680	.7796
1984	.5703	101.8	9401	.5243
1984r	.5848	106.5	9342	.5484

As indicated, the marginal propensities found in Table 2 might not accurately describe household behavior because spending could be influenced by transitory and distributional factors. To test this hypothesis households are grouped by their spending ratios and income shares. The data in Table 1 shows that about 60 percent of households, the lowest three quintiles, spend their income or more. For purposes there, these are assumed to be "low" income households while the remaining 40 percent are defined as "high" income households. Unusual swings in incomes also can influence spending. To capture this, households are divided into three groups, depending on their spending ratio. Dummy variables are used to place specific households in this two way classification scheme as follows:

- $d_1 = 1$  if  $apc > 2.0$  and in lowest three income quintiles;
- $d_2 = 1$  if  $0.5 \leq apc \leq 2.0$  and in lowest three income quintiles;
- $d_3 = 1$  if  $apc < 0.5$  and in lowest three income quintiles;
- $d_4 = 1$  if  $apc > 2.0$  and in highest two

income quintiles;

$d_5 = 1$  if  $0.5 \leq \text{apc} \leq 2.0$  and in highest two incomes quintiles;

$d_6 = 1$  if  $\text{apc} < 0.5$  and in highest two income quintiles.

lowest quintiles was much less (29 percent as compared to 36 percent in 1960) while those in the highest income quintiles with the lowest apcs rose from 4 to 19 percent. In both samples a majority of the income was controlled by a single group representing a minority of the households, implying that overall measures of spending behavior will strongly reflect the behavior of a minority rather than a majority of households.

The marginal propensities to consume for each group were estimated using dummy variables to reflect changes in the position of the consumption function and interactive dummy variables with income to measure the specific relationship between consumption and income (Studenmund and Cassidy, 1987: 157-165). The model tested was

$$(9) c_{ij} = a + \sum_{j=2}^6 d_j + \sum_{j=1}^3 l_j d_j y_{ij} + \sum_{j=4}^6 h_j d_j y_{ij} + e_{ij}$$

The effect of this grouping is shown in Tables 3 and 4. In the 1960 CES about 95 percent of the households had apcs in the middle range with equal numbers showing higher and lower ratios. The distribution of households is much more disperse in the 1984 CES. Only about 75 percent had apcs in the middle range while 12 percent with high ratios are in the low income quintiles and another 8 percent have high incomes and low ratios. For the 1960 sample, the income weights show income concentrated in the middle apcs with 60 percent in the high income group. The 1984 grouping shows some interesting differences perhaps reflecting the differences in the samples. The share of income in where  $a$  is the constant term, the  $d_j$ s represent intercept dummy variables, the  $l_j$ s are slope coefficients for households in the lowest three quintiles and the  $h_j$ s are slope coefficients for households in the highest two quintiles. Regression and weighted marginal propensities for each survey are found in Tables 5 and 6 with full regression results shown in the Appendix Table.

Overall, as the details in the Appendix show, the model fits the cross sectional survey data quite well. All slope coefficients are highly significant with  $t$  statistics ranging from 5.2 to 215.7 for the 1960 survey and from 7.0 to 132.8 for the 1984 one. The model also had high explanatory power with  $R^2$ s of .87 and .80. Most importantly, the marginal propensities are consistent with the hypothesis that transitory and distributional factors influence spending behavior. Households with high or low spending ratios had mpcs much different than those with more normal ratios and low income households uniformly had larger mpcs than those with high incomes. While these effects seem obvious, it should be remembered that they have not been considered in previous estimates of consumption behavior.

The total columns or rows, calculated using income weights, simply repeat the above conclusions on a larger scale. Most striking is the clear impact of income distribution on spending. In both samples, households with the lowest 60 percent of income had mpcs greater than 1.0 while the upper 40 percent of income had mpcs of .8 or lower. The total mpcs, an income weighted average of the six cells, were .89 for 1960 and .79 for 1984. These can be compared with the unweighted estimates of .78 and .55 found in Table 1. These results clearly show that differences between historic and household spending behavior largely disappear with relative simple adjustments in the survey data.

Because differences between "low" and "high" incomes are imprecise, the model was re-established using a number of different but representative income distributions. As the following shows, different distributions did not have much effect.

For example, the total mpcs fell only .03 when households in the lowest quintile were considered "poor" and those in the upper four "rich."

	20/80	40/60	60/40	80/20
1960	.86	.87	.89	.90
1984	.76	.78	.79	.78

Table 3  
Distribution of Households and Income Weights,  
1960 CES Survey

apc	Distribution of Households			Income Weights		
	Low Q	High Q	Total	Low Q	High Q	Total
apc > 2.0	.0239	.0007	.0246	.0068	.0007	.0075
0.5 ≤ apc ≤ 2.0	.5637	.3866	.9503	.3509	.6021	.9530
apc < 0.5	.0079	.0173	.0252	.0036	.0358	.0394
Total	.5955	.4016	1.0000	.3613	.6386	1.0000

Table 4  
Distribution of Households and Income Weights,  
1984 CES Survey

apc	Distribution of Households			Income Weights		
	Low Q	High Q	Total	Low Q	High Q	Total
apc > 2.0	.1210	.0082	.1292	.0290	.0098	.0388
0.5 ≤ apc ≤ 2.0	.4501	.3076	.7577	.2447	.5063	.7510
apc < 0.5	.0307	.0823	.1130	.0191	.1912	.2103
Total	.6018	.3981	1.0000	.2928	.7073	1.0000

Table 5  
Regression and Weighted Marginal Propensities, 1960 CES Survey

apc	Low Quintiles	High Quintiles	Total
apc > 2.0	2.3202	2.1476	2.3035
0.5 ≤ apc ≤ 2.0	1.0065	.8429	.9031
apc < 0.5	.4572	.3154	.3285
Total	1.0256	.8147	.8909

Table 6  
Regression and Weighted Marginal Propensities, 1984 CES Survey

apc	Low Quintiles	High Quintiles	Total
apc > 2.0	2.6339	2.3492	2.5620
0.5 ≤ apc ≤ 2.0	.9197	.7672	.8168
apc < 0.5	.3911	.3421	.3466
Total	1.0550	.6742	.7858

Tests such as these could be easily expanded by dividing households into smaller groups but this would not change the basic conclusion that spending behavior is significantly influenced by the distribution of income.

The total household mpcs, especially those for 1984, are still lower than those estimated with historic data. Reasons for this are open. The historic values could be biased in that consumption,

the dependent variable, is a near constant proportion of income, the explanatory variable (Thomas, 1989; Spanos, 1989). The various household models are probably misspecified because important demographic and sociological variables like age, race, sex, education and related household characteristics are omitted (Dadashi, 1990). Data differences and variable definitions might be important. Homeowning expenditures, social security contributions and consumer unit

coverage are all treated differently in the historic and household data (Rogers, 1990). But this incomplete list of differences and difficulties simply indicates the practical limitation of the theoretical notion that the aggregate marginal propensity to consume is a weighted average of individual propensities. The results found here strongly suggest that when appropriately specified, household and historic aggregate consumption function models will yield similar descriptions of spending behavior.

Appendix : Regression Results and Means

Variable	1960 CES			1984 CES		
	Coefficient	t -stat	Mean	Coefficient	t -stat	Mean
a	.04299	4.6	-----	.6648	16.8	-----
d <sub>1</sub>	excluded	---	.0239	excluded	----	.1210
d <sub>2</sub>	-.0378	-3.9	.5637	-.5695	-12.3	.4501
d <sub>3</sub>	-.0478	-2.2	.0079	-.6562	- 6.3	.0307
d <sub>4</sub>	.0133	.2	.0007	.4548	2.5	.0082
d <sub>5</sub>	.0006	.1	.3866	-.4794	- 9.8	.3076
d <sub>6</sub>	.0045	.3	.0173	-.4866	- 7.4	.0823
d <sub>1</sub> y <sub>i</sub>	2.3202	41.5	.0028	2.6339	54.6	.0634
d <sub>2</sub> y <sub>i</sub>	1.0065	122.2	.1449	.9197	60.9	.5352
d <sub>3</sub> y <sub>i</sub>	.4572	5.2	.0015	.3911	7.0	.4017
d <sub>4</sub> y <sub>i</sub>	2.1476	15.8	.0003	2.3492	45.8	.0214
d <sub>5</sub> y <sub>i</sub>	.8429	215.7	.2486	.7672	132.8	1.1075
d <sub>6</sub> y <sub>i</sub>	.3154	37.9	.0148	.3421	47.1	.4182
Adj R <sup>2</sup> :	.8672			.7952		
N	13680			9342		

Note:  $\sum d_i = 1.0000$  (relative frequency) and  $\sum d_i y_i = \text{total income}/N$ .

#### Endnotes

1. In modern textbooks of macroeconomic theory, cross sectional findings simply serve as a literary device to introduce historic theories of spending behavior.
2. All cross sectional studies cited in Friedman's (1957) extensive review were based on grouped data. Brumberg and Modigliani (1954) also probably relied on results from grouped data because this was the only form survey data were published.
3. If dissavings is caused by unexpected, transitory income changes, then the high percent of dissaving households suggests high variability in household incomes. If household incomes are highly variable, then determination of permanent or lifetime income

must be highly uncertain. In other words, while lifetime spending plans might be devised, the probability of following them is small.

4. Nonpositive consumption suggest some recording or classification problem while nonpositive income usually reflects the mixing of personal incomes and sole proprietorship losses. In either situation, since reasons for the unusual figures could not be deduced from the original data the observations were excluded.

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## Optimization Models as a Basis for Prescriptive Consumer Economics

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The American Council on Consumer Interests was founded to advance the consumer interest, including promotion of research which would help consumer education and consumer policy. Although theoretical and empirical analyses can be important for consumer policy and education, it is important for maintaining ACCI's unique niche to focus on prescriptive consumer economics. There are other academic organizations focusing on consumer research or consumption economics, but ACCI is the only organization providing a forum for academic research relating to the consumer interest. There may, however, be a conflict between the needs of faculty at research universities, and the needs of consumers for advice and the needs of legislative bodies and administrative agencies for input on public policy. Organizations providing informal education to consumers, such as the Cooperative Extension Service, and mass media and textbook authors all have a great need for useful prescriptive consumer economics research. Unless such research is rigorous, academic researchers will not be rewarded for it.

This paper focuses on one approach to resolving the conflict between the practical needs of consumers and the driving force in academia. A rigorous yet useful approach may be obtained through the use of optimization models as a basis for prescriptive consumer economics. I have developed these ideas at greater length elsewhere (Hanna, 1989; Hanna, 1990). There is a need to be "prescriptive" in order to help consumers, because for many decisions, provision of information will not be sufficient to help consumers make optimal decisions. As Russo (1988) and others have suggested, consumers may be unable or unwilling to process information. Less educated consumers may be particularly unable and/or unwilling to search for and process information about complex products and services, even when there are clear benefits to the search (Chang & Hanna, 1992).

Economic theory has not seemed appealing as a source of insight about prescriptive consumer economics because the economic theory of the household has not really focused on normative implications for individual households, but rather on constructing a consistent theory to be used for explaining and predicting market demand for particular goods and services. Consider the usual budget constraints and indifference curves. If we assumed that all consumers shared the same preferences (identical sets of indifference curves), then it might be possible to derive optimal consumption patterns for goods for different price and income levels. However, for many goods, tastes obviously vary, and it is perfectly reasonable for two individuals with the same income and wealth to consume different levels of goods. This could be illustrated merely by drawing a different set of indifference curves. The usual assumption that consumers are behaving optimally is also hard to accept in a field concerned with helping consumers do better.

Russo (1988) discusses barriers to effective information use by consumers. These barriers may be important even for relatively simple consumer products. They may be insurmountable for most consumers for more complex products and for financial services such as insurance. The possibility that consumers may not behave optimally makes use of economic models for empirical analysis and prediction problematical, but does not preclude the use of economic models for prescriptive applications.

It may be useful to make an effort to define a consumer decision in terms of an optimization model even if the decision is too complex for rigorous solution. An optimization model can be described as:

1. an objective function (e.g., utility function),

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2. instruments (e.g., consumption level of each good),
3. constraints (e.g., budget constraints), and
4. normative rules (e.g., allocate income among goods so that the ratio of marginal utility to price is the same for all goods).

Economic theory has more obvious applications to business management than to consumer decisions, because the objective function of a firm is usually assumed to involve the maximization of profit. If profit maximization is considered as a static, one period process, and if information on marginal revenue and marginal cost is available, economics can provide clear guidance for business management. In the real world, this is not always possible, and many successful businesses have no guidance from economists. There are some technical problems of optimization amenable to quantitative analysis, such as inventory control problems, while there are other optimization problems, such as whether to introduce a new product, which are less quantifiable. There is a vast literature on optimal financial management. Agricultural economists have produced many recommendations for increasing farm profits.

Prescriptive applications for consumers have been limited to relatively narrow problems with obvious objective functions, such as how long you should keep your car or how much time should you spend shopping. Geistfeld (1990) has proposed use of decision-making aids to facilitate consumer choices. Some applications will require sophisticated use of utility functions.

Two factors have inhibited the use of economic theory for prescriptive consumer economics:

1. The idea that utility functions are so individual that it is impossible to make assumptions about any individual's utility function; and
2. The focus on using calculus and other mathematical techniques, which leads to unrealistic assumptions about behavior and constraints.

One example of how these factors can be overcome is the Life Cycle Savings Program (Hanna, 1989; Hanna, 1990; Chang, Fan & Hanna, 1991). This computer program has been used with 300 undergraduate students and is currently being tested with adult Cooperative Extension audiences to help them with an extremely complex decision: the optimal allocation of consumption over the life cycle. The program uses some standard simplifying assumptions, such as utility each year being based on the total real value of consumption each year, and lifetime utility being an additive function of each year's utility, discounted for risk of death and family size changes. The program can tailor advice to the particular situation of each household, yet can be used by unsophisticated consumers. A modified version of the program has also been used to generate complex hypotheses for empirical analysis of life cycle savings patterns (Lee & Hanna, 1992).

Chang, Fan & Hanna (1992) provide another example of how both potential problems can be addressed. The authors approach the question of optimal credit use with uncertain income by using a class of intertemporal utility functions. By assuming that utility is a function of total consumption per year, and providing intuitive explanations for the utility function parameters, the authors allow for a narrower range of individual differences. By using simulations to find the level of savings or dissavings that maximizes expected utility, the authors are able to specify a different interest rate for borrowing and saving. The results presented are original, and can be extended to more than two periods and more than two states of the world.

There is a potential for applying similar techniques to a variety of interesting consumer issues, with important implications for consumer education, consumer policy, and empirical research. Ultimately, prescriptive consumer economics research can provide useful input into consumer education, while serving the needs of academic researchers. Such research can also serve as a basis for expert systems software for consumers (Hanna, 1991). Research intended as prescriptive consumer economics can also improve theoretical and empirical research.

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## Consumer Economics Professors Should Actually Profess Something

E. Thomas Garman, Professor<sup>1</sup>

In a recent speech an official of the International Monetary Fund, Aliou B. Demba, stated that "there is no room for ethical neutrality" for professors in higher education. Demba argues that professors can choose first by participating in efforts to transform the social and economic institutions of society. Second, professors can choose by trying to influence, cultivate, nurture, challenge and shape the minds of their students. Moreover, to be a professor in the United States is to be responsible for the logical implications of one's teaching.

Professors who choose not to offer normative views or at a minimum frame such problems and issues for academic debate for their students are not professing. Instead, they are merely practicing passive teaching.

The field of consumer economics lends itself quite naturally to effective utilization of a normative approach to teaching. Examples of prescriptive areas in consumer economics for professors to consider teaching include proper uses of credit, signals of credit overextension, ratio analysis of financial information, principles of wise buying to help obtain "best buys" for consumers, responsibilities of consumers, marketplace ripoffs and misrepresentations (even though many are legal), rational steps in the buying process, efficient saving/spending decisions, societal concerns about the environment, cautions about personal consumption of tobacco and alcohol, housing affordability guidelines, legal tax avoidance, determining minimal insurance needs, and rules of thumb in retirement planning.<sup>2</sup>

To empower people to make effective

decisions themselves, consumer economics professors should teach information and guidelines for consumption and also present alternative approaches to resolving problems and issues that can be taken by individuals as well as by society at large. Professors who accept the challenge of teaching consumer economics in a normative manner are responsibly encouraging their students both to live better lives and advocating that the world do the same.

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<sup>2</sup> However, future prospects for the field of consumer economics are poor if history is illustrative because the consumer economics professors across the country have yet to agree upon definitions of key terms, scope and sequence of the undergraduate curriculum, targeted employers for graduates, or national accreditation standards for colleges and universities.

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<sup>1</sup> Virginia Polytechnic Institute & State University

## An Acronym to Help You Remember to Make Choices You Won't Regret

James N. Morgan, The University of Michigan<sup>1</sup>

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After years of wondering why it was so difficult for students to think like economists, and after some experiments that showed they could handle ideas one at a time but not all at once, we developed a mnemonic device to help people apply the logic of benefit-cost analysis systematically.

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The economic logic of cost-benefit analysis often seems unrealistic for the complex choices we have to make. What we propose is to show how to quantify in comparable (additive) terms as much as possible, leaving the chooser to decide whether the non-measurable preferences remaining for one alternative outweigh its measurable extra net costs. A check-list might help. If you dread finding later that you did the wrong thing, think of DREAD to remember what questions to ask beforehand. It is necessary to compare the benefits minus costs of each alternative, but they must both be:

DISCOUNTED to present values to make all amounts comparable, since money earns interest if you have it and costs interest if you owe it.

REAL, in current dollars, adjusting downward future amounts fixed in dollars for possible inflation. The real interest rate, after deducting inflation, tends to be 3%. Indeed, where costs and benefits will both go up with inflation, you need not predict inflation, or adjust for it. Just use the 3% real discount rate, and DREAD becomes DEAD.

EXPECTED values of uncertain benefits or costs, derived by multiplying them by the probability that they will occur. If there are alternatives, only one of which can happen, you can ADD their expected values!

AFTER TAXES, whenever the benefits are taxable

income or the costs deductible for tax purposes, you want to multiply them by  $(1 - \text{marginal tax rate})$ . The marginal tax rate is the percent of the last dollar of income that is taken in taxes. But state and federal taxes overlap, since the former can be deducted from income for federal tax purposes. Your combined marginal tax rate is  $\text{State MTR} + \text{FedMTR}(1 - \text{StateMTR})$ .

DOLLAR amounts, converting non-money ones as much as possible into dollars through "imputation" or "opportunity cost". What would the money tied up have earned elsewhere? How much less will it be worth a year later (depreciation)? Most, including imputed net rent on home, are untaxed.

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<sup>1</sup>Emeritus Professor of Economics

## Thoughts for the 21st Century: The Payoff to Intelligent Consumer Purchase Decisions

E. Scott Maynes, Cornell University<sup>1</sup>

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This paper seeks to provide in a single article as much sound purchase advice as possible. Its spirit is normative, telling the consumer what he/she should do to maximize his/her satisfaction from purchases, given his or her preferences. The article is an update of the author's 1969 article in the Journal of Home Economics (Maynes, 1969) and Ch. 2 of his 1976 book (Maynes, 1976). Purchase advice, taking into account price and quality, is given under two conditions: perfect information and imperfect information. The author's prescriptions will accommodate "satisficers" if these are interpreted to be individuals (1) with high search costs or (2) low tolerance for perfection. The reader is warned that this is an article-in-the-making, hence it is presented in outline form.

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### I. This Paper

#### A. An Update of:

1. My Journal of Home Economics article (Maynes, 1969)
2. Ch. 2 of Decision-Making For Consumers (Maynes, 1976).

#### B. Goals

1. To help household purchasing agents function more effectively;
2. To embody in a single article as much sound purchase advice as possible.

### C. The Reader's Role

1. This is not a finished product; it is an article-in-the-making.
2. I invite your suggestions, positive and negative.
3. I invite your patience. Necessarily, some of this is "old hat." What I am trying to do is to distill that which is central and useful--adding, discarding, and modifying as appropriate.

## II. Payoffs, Costs, and the General Rule

### A. Payoffs to Search

1. A search is "each attempt to secure and act on information regarding the product."
2. Payoffs to search include:
  1. Obtaining lower prices, quality constant;
  2. Attaining better quality, price constant;
  3. Achieving your desired trade-off between price and quality;
  4. Securing the set of features/accessories that fit your needs;
  5. "Winning"--the extra satisfaction that comes from feeling that you have done well in purchasing, perhaps "beating the system."

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<sup>1</sup> Professor  
Consumer Economics and Housing

3. This analysis focuses on (1), (2), and (3).

B. Costs of the Search

1. Cf. (Maynes, 1976), pp. 19-20.
2. Both objective and subjective costs are real and must be taken into account for search to be "correct."

C. The General Rule: How Many Searches?

1. The general rule--the economist's "marginal rule":

Keep making searches as long as the expected gross payoff from an additional search exceeds the expected marginal cost of the search.

2. The spirit of the rule: utility or satisfaction maximization.
  - a. This approach accommodates "satisficers." Satisficers are individuals whose subjective search costs are high.

III. Purchase Decisions Under Perfect Information

A. Assumptions and Concepts

1. The purchaser possesses accurate price-quality maps of the local market for the product under consideration, compiled under the assumption of full information and full understanding. Cf. (Maynes, 1976) for a detailed explanation of price-quality maps. Cf. Figure 1 for an illustrative map of the local market for Panty Hose.
2. The price depicted on these maps is the single, lowest price that a retailer will honor for all customers.
3. Quality consists, arithmetically, of a weighted average of utility-conferring characteristics such as comfort, safety,

durability. In words, quality consists of the extent to which a variety of a product, a brand-model combination, provides the characteristics that the consumer desires.

4. All consumers accept the quality assessments as accurate and complete.

B. The Purchase Decision

1. Why analyze choice under the unrealistic assumption of Perfect Information? Because it instructs.
2. The goal of the utility-maximizing consumer: the Perfect Information Frontier (PIF): by definition, the set of lowest prices for each level of quality.
3. Where on the PIF?
  - a. At the price-quality trade-off that suits you best;
  - b. Formally, where

$$G_k^{ij} = \frac{\sum_{m=1}^M W_m^{ij} \cdot Ch_{km}^{ij}}{\sum_{m=1}^M W_m^{ij}}$$

where:  $G_k^{ij}$  = the quality of the kth variety of the jth product class as assigned by the ith individual

$W_m^{ij}$  = the weights assigned to mth characteristic in the jth product class by the ith individual

$Ch_{km}^{ij}$  = the characteristic score assigned to the mth characteristic of the kth

variety in the  $j$ th product class by the  $i$ th individual

this, cf. (Maynes, Morgan, Vivian and Duncan, 1977).

In words, the intelligent consumer seeks to allocate his income among products and varieties of products so that every dollar spent yields the same increment of quality.

- c. Would a rational consumer ever purchase an above-PIF variety? Yes, because these charts are location-specific and it could be that on-frontier varieties are only purchasable from retailers whose location is inconvenient.

C. Lessons From Charts (only Figure 1 is shown)

1. For varieties of uniform quality, search only for the lowest price.
2. Often the PIF has a modest slope, implying that a "large" increase in quality may be obtained for a "small" increase in price. On some price-quality maps the PIF even consists of a single point: the best quality is offered for the lowest price.
  - a. Many people find this implausible, feeling that higher quality must involve higher costs and hence higher prices. There are two flaws in this view. First, the technology and productive processes are so complex that there is no guarantee that greater outlays will yield greater quality. Second, on price-quality maps we are dealing with retail prices that are often quite independent of manufacturers' or wholesalers' prices.
3. Where can a consumer find price-quality maps? The sad story is that there is no organization that produces and distributes price-quality maps and the information behind them. For a blueprint of a "Local Consumer Information System" that would do just

IV. The Norm: Purchase Decisions Under Imperfect Information

A. Chaos: The Daunting Reality of Most Consumer Markets

1. In a perceptive article published 33 years ago Professor Ruby Turner Morris and her student, Claire Sekulski Bronson, documented the "chaos" of local consumer markets. (Morris and Bronson, 1969). By this they meant the near-zero correlation they observed between the rankings of list prices and quality.
2. More recently, Loren Geistfeld (1988, p. 169), summarizing his masterful review of the extensive research on the price-quality relationship since Morris and Bronson, carefully concluded: "Existing research suggests that consumer markets are not working well as indicated by weak price-quality relationships."
3. Since 1969 my students have prepared hundreds of price-quality maps for a wide range of products and services. The dominant perception: chaos, i.e., near-zero correlations between price and quality.
  - a. Cf. Figure 1, depicting the price-quality relationship for Panty Hose, as an example. Cf. (Maynes 1991) for other price-quality maps.

B. Assumptions

1. As noted earlier, there exist no "local consumer information systems" that produce and disseminate price-quality maps.
2. The closest substitutes:



- a. Consumer Reports which assesses quality for 60 to 70 products per year. Even for these products, Consumer Reports provides limited and insufficient information on price--publishing not the price offered for a variety by each local retailer and not the identity of local retailers selling each variety tested, but instead list, average, or a range of prices.
  - b. The Mobil, Michelin, and other travel guides do provide approximate quality and price information for a representative set of hotels, motels, and restaurants across the U. S.
  - c. The Washington Consumers' Checkbook (199X) and Bay Area Consumers' Checkbook (San Francisco) offer good data on quality and approximate data on about 25 services per year in the Washington and San Francisco Metropolitan Areas.
3. Hence, the consumer is "on his own" in searching for information in chaotic markets.
- C. Some Signals and Rules-of-Thumb That Do Not Work
1. "Price is an indicator of quality" or its cousin, "You get what you pay for."
    - a. These rules, so widely accepted, are valid only in workably competitive markets, e.g., a farmers' market or the New York Stock Exchange.
    - b. These maxims will not work in markets characterized by the "weak" price-quality relationships" that Geistfeld (1988, p. 169) sees as the norm.
  2. "Always buy at a 'low-priced outlet,' a 'discount store' or similar retail outlet."
    - a. Finding, based on hundreds of price-quality maps: there is no such thing as a "low-priced" or "high-priced" outlet. Most retailers tend to offer some varieties on or near the PIF, some in a middling region, and some far above the PIF.
    - b. As an example, consider the price-quality map for Panty Hose--Figure 1. Woolworth's, often thought to be a "low-priced" store, offers Variety I on the PIF, J--an inferior variety--at a somewhat higher price, M at twice the frontier price, and G--another inferior variety--at three times the frontier price. Rite Aid, a mass market chain drugstore, offers the best quality variety of Panty Hose, K, at the lowest price, thus placing it on the PIF. But Rite Aid also sells Variety N at twice the frontier price, G and M at three times the frontier price. Three posh stores--J. W. Rhodes, Iszards, and Holly's--sell Variety C at five times the frontier price. But they also offer Variety A at only twice the frontier price.
    - c. Explanation. A classic article by Oxenfeldt (1973) delineated twenty different strategies that a retailer might follow in setting its prices. When each store follows its own strategy in setting prices and faces different parameters --different costs or price elasticities--in executing its strategy, this produces a wide range of prices. In the informationally imperfect markets that Geistfeld finds predominant, consumers are unable to obtain and act upon information so as to cause prices (quality constant) to converge.

#### D. The Purchase Decision

1. The Marginal Rule (II-C) remains our fundamental guide: Keep making searches as long as the expected gross payoff exceeds the expected marginal cost of each search.

a. In turn, the expected gross payoff will depend upon (1) the distribution of prices, quality constant, that the consumer faces, and (2) the efficiency of his search. In (2) and (3) we turn to each of these.

b. As to costs, it is rational for the intelligent consumer with "high" search costs to search less. This holds whether his high search costs are attributable to objective costs--he doesn't own a car--or subjective costs--he has a strong distaste for shopping.

2. But the central question still remains: what price reduction can I expect per search?

a. Lacking further information, the consumer should expect to encounter the same relative price dispersion, quality constant, that Maynes-Assum found in their 1982 study (Maynes and Assum 1982).

(1) Table 1 shows this dispersion and expands it for representative outlays of different sizes.

(2) Although I have made no formal estimates of the shape of the distribution from the hundreds of price-quality maps prepared by my students, it is my strong impression that it is "normal."

b. Clearly, price distributions like this pose enormous scope for gain or loss.

4. How many searches should the intelligent consumer undertake?

a. At least three, unless one is content, for this product, to wind up far above the PIF.

b. However many searches the consumer judges appropriate on the basis of Table 1, he should search more when:

(1) An item looms relatively large in the long-run household budget, i.e., a "big-ticket" item, e.g., a large TV, or a "small-ticket" item purchased repeatedly, e.g., gasoline.

(2) When the consumer is less affluent rather than more affluent;

(3) When the cost of the search is "low":

(4) When "winning" is important;

(5) When, with respect to price discrimination, it is possible to:

- (a) Take advantage of it;
- (b) Initiate it.

#### E. Some Helpful Insights That May Make Your Search More Effective

1. Price and Product Discrimination

a. Defined:

(1) Price Discrimination occurs when "a single seller charges different customers different prices for the same product." Examples: Senior Citizens discounts, "weekend specials" (on anything!).

(2) Product Discrimination, logically equivalent to price discrimination, occurs when "a single seller offers different variants of the same product to different customers for the same price." Examples: a hotel gives you a suite instead of a double; the seller includes a battery with the sale of a camera for one customer, but not for another.

b. Its Prevalence: The Forms It Takes

- (1) Every genuine sale or "special";
- (2) Every instance of bargaining;
- (3) Coupons: cents-off, 2-for-1, double couponing, rebates, cash coupons;
- (4) Off-peak discounts: movies, travel tickets, "early bird" specials, lunch vs. dinner prices, off-season discounts, etc.
- (5) Discounts to members of organizations (employers, churches, fraternal organizations, professional organizations, credit unions, etc.) on car rentals, air tickets, insurance, prescription etc.;
- (6) Loyalty clubs: lists of longstanding and former customers, "Frequent Flyers," similar arrangements.
- (7) Product discrimination:
  - (a) Including "free" ancillary services, added features, or a higher level of quality for the same price;
  - (b) Upgrades.

c. Consumers May Initiate Price Discrimination

- (1) "Ask and it shall be given you; seek and ye shall find; knock, and it shall be opened unto you." (Matthew VII, 6) As this Biblical injunction suggests, the intelligent consumer can take the initiative in seeking a lower price.

d. Implications for consumers: payoffs!

e. For an exhaustive treatment of price discrimination from the consumer viewpoint, cf. (Maynes, 1990). For a formal and sophisticated survey of price discrimination in most of its facets--but not from the consumer viewpoint, cf. (Phlips 1983).

2. The number of sellers effect

- a. As the number of manufacturers and/or retailers increases, expect more variation in price, quality constant. Hence, search more.
- b. This is the opposite of the Economics 1 lesson that perfect competition yields a single, low price.

3. Product Differentiation refers to the actions of sellers to make their variety of a product different and better or to make their variety appear to be different and better. Thus, differences may be real or imagined. Is Chanel Numero Cinq a really superior fragrance?

- a. Aware of this concept, intelligent consumers will skeptically try to discover whether claimed differences are real or imagined, and--if real--whether the improved quality merits the higher price usually asked.
- b. Example. The knowing know that Bayer aspirin is identical to other aspirins, Bayer's claims notwithstanding. They will not be surprised to learn that buyers of Bayer's pay twice as much as buyers of other brands. And, of course, they will not be caught dead buying Bayer's.

4. Monopolies broadly construed, meaning one or few sellers of the same product, are still with us. Implications for search:
- If the monopoly is real, reduce your search. There can be no payoff.
  - But the intelligent consumer will be aware of substitutes. Consider air travel from Ithaca International. There are three airlines, drastically narrowing search, until one recalls that Syracuse is a not-too-distant substitute and that one can travel by bus, car (one's own or others'), bicycle, or hitchhike.
5. Price Fixing.
- Explicit price-fixing by presumed competitors is rare these days. But a search that uncovers different retailers charging identical prices for identical varieties should be instructive: call off further search.

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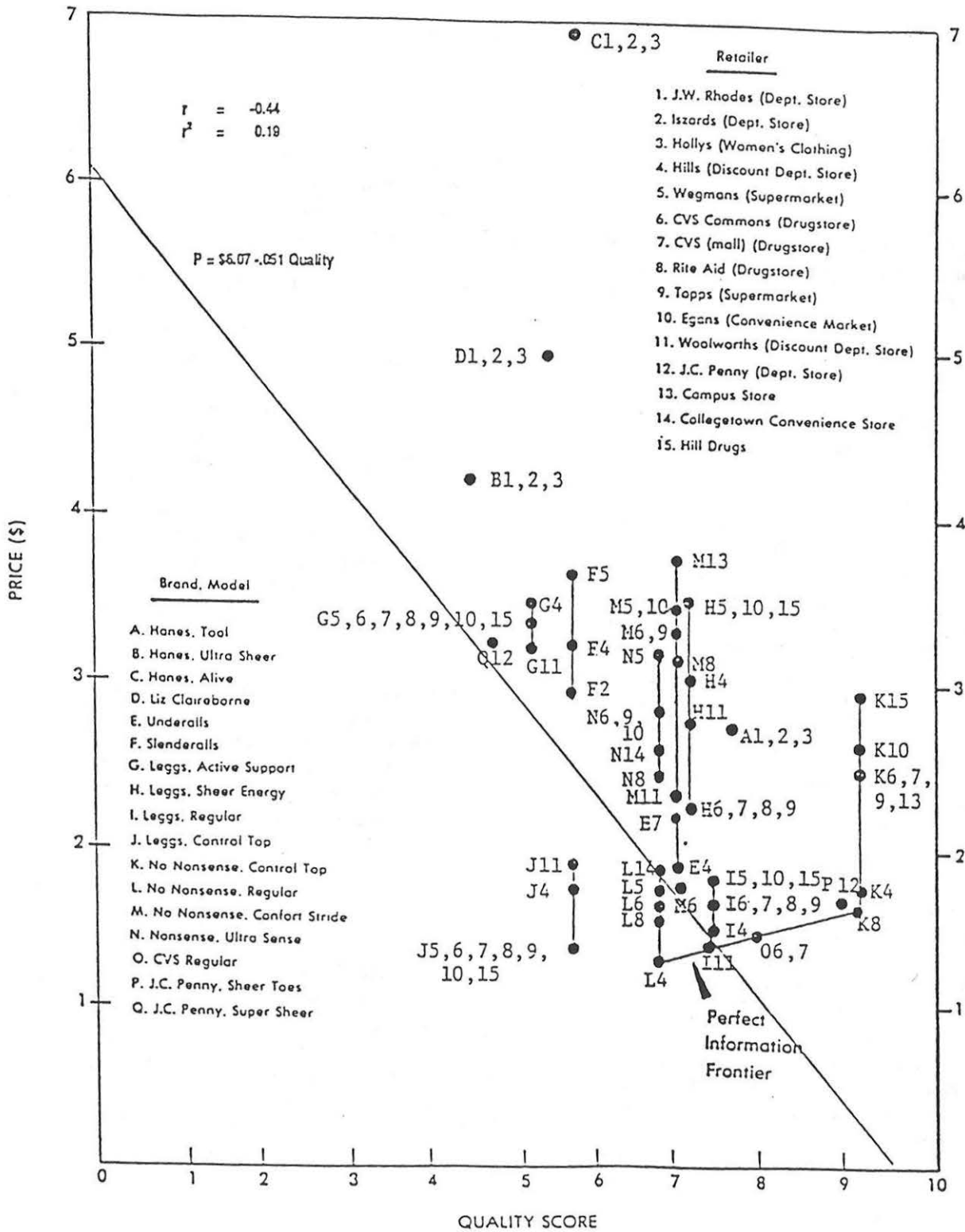
Table 1  
Expected Price Distribution Under Imperfect Information

Highest Price As Percent of Lowest Price	Percent Dist. of Prices	Applied to Product with				
		\$5	100	Low Price of <sup>b</sup> 500	1,000	5,000
100% to 129%	23%	\$6	\$120	\$600	\$1,200	\$6,000
130 to 149%	12%	7	140	700	1,400	7,000
150 to 19%	23%	8.75	175	875	1,750	12,250
200% or more (250)	42%	12.50	250	1,250	2,500	12,500
	100%					

<sup>a</sup>Maynes and Assum (1982), Table 2.

<sup>b</sup>Values are based on midpoints of the distribution in the stub.

APRIL 4-10, 1988<sup>a</sup>  
 by  
 Gail Leopold, Margo Shatz, Leslie Topiol



## Comments On Prescriptive Consumer Economics

Michael L. Walden, North Carolina State University<sup>1</sup>

I welcome the chance to comment on these four fine papers which deal with a very important topic. I think many journals have a bias against publishing papers with practical implications and recommendations. Personally, I've published my share of papers in *JCA*. However, recently one of my papers was rejected because it didn't test hypotheses. How silly and dangerous. Surely there's room in *ACCI* for papers emphasizing practical recommendations as well as those which empirically test models of behavior.

Now on to the papers! Professor Garman gives us a strong challenge in recommending that consumer economists should profess something. I agree that we must be involved in helping solve the resource allocation problems of our clientele. Professor Garman leaves open the issue of what norms and standards consumer economists should use in their "professing." My own answer to this issue is that consumer economists should profess the standards and concepts which are found in microeconomic and macroeconomic theory. These theories and concepts are the guides which I use in making consumer prescriptions.

The Morgan and Maynes papers represent the "state of the art" of prescriptive consumer economics. Morgan's DREAD acronym is a clever reminder of key economic concepts which should be used in consumer decision-making. I particularly like the "R" (real) reminder as it applies to savings goals. For long-run savings (e.g., saving for retirement, saving for a college education), it's impossible to predict the ultimate nominal dollar cost of the good or service, because it's impossible to predict inflation over such a long time period. It makes much more sense, as Morgan states, to use a real interest rate (e.g., 2 or 3%) to calculate savings

requirements. For an outline of such a procedure as applied to education savings and retirement savings, see my text, (Walden, 1992, pp 497-503 and 513-524).

Let me make a couple of comments about Morgan's statements regarding homeownership. The housing market has been hit, and appreciation rates lowered, during the 1990-91 recession. In fact, relative to the decline in real Gross Domestic Product, homeownership has been hit harder during the 1990-91 recession than during the 1981-82 recession. I suspect part of the reason is the reduction in the federal marginal income tax rate. Also, the interest and property tax deductions associated with homeownership will be hurt in the future due to the indexing of the standard deduction (see Walden, *Economics and Consumer Decisions*, 1992, p. 163).

The updated Maynes paper continues to use excellent techniques and make excellent recommendations on smarter shopping. It's the application of techniques like these, or proxies to them, by consumers that keep markets competitive (there is a social payoff, as Maynes states).

I do, however, have some concern about Maynes' examples. Maynes fails to account for store characteristics and location in his price/quality correlations. Stores with more accessible locations and better amenities will be able to charge higher prices for all quality products. Also, there are many policy provisions which Maynes doesn't account for that can influence the premiums for term insurance. We need an extension of Maynes' work which adjusts the price/quality correlations for store locations and amenities and for all product characteristics.

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<sup>1</sup> Professor, Department of Agricultural and Resource Economics.

The Hanna paper represents the next frontier in prescriptive consumer economics. Hanna is quite correct in stating that some of the more interesting practical questions regarding optimal saving and borrowing behavior require the use of utility functions. I applaud Hanna for developing this practically-oriented research agenda, and I recommend this agenda to other economist researchers.

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## The ERIC Database: Information for the Asking!

Judith O. Wagner  
ERIC Clearinghouse on Adult, Career, and Vocational Education

### Abstract

ERIC is a national education information system sponsored by the Office of Educational Research and Improvement, U.S. Department of Education. The goal of ERIC is to identify, select, process, and disseminate information in all areas of education. ERIC consists of 16 clearinghouses, each serving a specialized field of education. The ERIC system offers a number of information services including monthly abstract journals, microfiche and paper copies of materials, review and synthesis papers, and computer searches.

### Description

ERIC is the world's largest and most comprehensive education database. Since 1966, ERIC has been collecting and making available all types of materials in all areas of education. ERIC is sponsored by the Office of Educational Research and Improvement, U.S. Department of Education. It consists of 16 subject-oriented clearinghouses, 3 adjunct clearinghouses, and support services. Of particular interest to consumer affairs educators is the ERIC Clearinghouse on Adult, Career, and Vocational Education (ERIC/ACVE) located at The Center on Education and Training for Employment at The Ohio State University and the Adjunct ERIC Clearinghouse on Consumer Education located at the National Institute for Consumer Education.

ERIC identifies, solicits, abstracts and indexes, and makes available "fugitive" materials--those that have been developed with public funds by an agency for its own use. This includes curriculum developed by a school district, reports of research done by an R&D center, conference proceedings, descriptions of classroom practices, program evaluations, conference presentations, and "how we made it work" papers.

### User Services

User Services at ERIC/ACVE include disseminating publications, answering questions, conducting computer searches, and referring clients to other agencies. ERIC/ACVE user

products include ERIC Digests, Practice Application Briefs, Trends and Issues Alerts, and bibliographies. These are available at no cost to the user. The ERIC Clearinghouse on Adult, Career, and Vocational Education will provide materials and information to suit your needs. If appropriate, a computer search of the ERIC database might be run. If the information you need is not available from ERIC/ACVE, you will be referred to the appropriate source.

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To learn more about the ERIC system and the ERIC Clearinghouse on Adult, Career, and Vocational Education, please write to the User Services Coordinator, ERIC/ACVE, 1900 Kenny Road, Columbus OH 43210-1090.



## The Global Consumer Movement

Gerda Hellman, IOCU<sup>1</sup>

I am honored to present this speech. Esther Peterson has done a lot on Consumer Policy in the U.S. I do not know much about that, I do know that she did a lot for IOCU on the global level.

### Introduction

- \* What does it mean to have a global consumer movement?
  - \* What difference does it make to consumers all over the world?
1. IOCU at a glance
    - \* Founded in 1960 by 5 private consumer organizations (Consumers Union/Consumers Association/Consumentenbond/Australian Consumers Association/Verbruikersunie) in an office in The Hague.
    - \* Now after 30 years members in 68 countries - more than 170 organizations. Associate members - corresponding members - supporting member. ACCI has been Associate member since 1963.
    - \* Members are in the first place private organizations (NGO). They are non profit, independent from industry, (no advertisements) non-party political. There are also members who are government sponsored or departments (corresponding members).
    - \* Structure: General Assembly - Council - Executive.
    - \* Office to carry out work. Director-General - 3 Regional Offices: ROAP/ROLAC/ROENA

(office for industrialized countries)

- \* Where does the money come from?:
    - Membership fees;
    - Funds - development.
2. IOCU is umbrella organization founded to:
    - \* coordinate interests of consumer organizations (service/support) e.g. seminars, working group meetings, formulate policy.
    - \* develop consumer movement areas where it does not exist. e.g. now we have the Africa Programme - Eastern Europe Programme. New groups have to come up in Central and Eastern Europe.
    - \* represent the consumer interest at global level, e.g. observer status at UN-ECOSOC, WHO, etc.

All three Regional Offices have to develop a programme which follows these aims. Differences in work - development work ROAP (Asia & the Pacific)/ROLAC (Latin America & the Caribbean).
  3. What does the workprogramme look like.
    - \* We have basic services - World Consumer - Members List - Consumer Directory - WCRD-KIT.
    - \* Consumer issues: food, trade, health, environment, poverty/debt issue. Tools like: comparative testing, consumer education
      - e.g. food issue:
        - \* service/support, make people meet/define policy
        - \* develop
        - \* information
        - \* represent Codex Alimentarius FAO/WHO.

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<sup>1</sup>Director, Regional Office for Europe & North America

4. Policy: Why is it important to have a policy? How does it work? A policy document is a help for consumer organizations (basic principles). Example for good is given:
- \* represent consumer interest at national level. Important that we say the same thing.
  - \* global level food standards Codex Alimentarius (e.g. food additives) regional level e.g. Europe.
  - \* national representatives of government meet IOCU representatives/own representatives
  - \* reporting back to IOCU - national consumer organizations - national representatives, we say the same thing = coordination.

Other examples:

5. Drug promotion - University of Groningen (Netherlands). Role for academics. World gets smaller every day - communication - global trade - global economy. National thinking is not enough. We have to go international. with regulations governing pharmaceutical products.

6. Consumer Protection is our ultimate goal. I think we all agree that to educate and inform consumer is not enough. There are certain basic rights of the consumer which have to be protected by law. Basic framework: UN Guidelines, adopted in 1985 unanimously. Guidelines - no law but we have worked with it (TOOL). We ask our members to approach government, Consultations Latin America - Asia. Many governments use guidelines as framework, Eastern Europe, e.g. WCRD kit. .

IOCU influences consumer protection in various countries. Each country uses it in its own way.

7. Consumerism is often seen as how to buy your TV, Washing Machine, etc. But for us in IOCU and in particular for our members in developing countries it is such more: it has to do with development work. Consumption is related to development. Environmental problems: a lot to do with consumerism. Consumption is by definition related to

environment and recognized by UNCED. We need to define our roles as consumer organizations.

8. Code of Conduct has to do with development and environment. Chapters on aspects: Consumption and Environment. Welcoming of Transnational Corporations (TNC's) in developing countries - rules for TCN's to take care of environment. Responsible TNC's have no problems.
9. To work on all these issues it is necessary to have a clear identity and work towards a high profile. Who are we?: in relation to business, in relation to governments (public goods and services).

We are clear on our relation to business; clarity towards governments is more difficult.

There are many consumer organizations: government bodies - private consumer organizations.

#### 10. Closing

- \* What does it mean to have a global consumer movement?
- \* To be part of global consumer movement - know that in other countries this also works. To share experiences it required solidarity of the members; give and take.
- \* Does it make a difference to consumers all over the world? by the examples I gave, I hope you agree with me that it definitely makes a difference. By creating - basic consumer legislation;
  - supplying information to consumers;
  - creating awareness e.g. seek redress;
  - in development work and environmental policies.
- \* Esther has been at the cradle of the Guidelines which are the basic document for consumer protection. She is also both in the U.S. and internationally the consumer advocacy champion.