

Consumer Access to Health Care: Basic Right 21st Century Challenge

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Today, this country is confronting a crisis in health care of broad and critical dimensions. Dwarfing all others is the issue of the consumer's right to affordable quality comprehensive health care.

This paper will deal first with the dimension of the health care crisis confronting this country. It will then consider the major proposals for health care reform and finally, it will examine the role of the consumer movement and of ACCI in ensuring that the consumer's interests will be protected in the current debate on how best to provide equitable and affordable health care to all Americans without regard to the individual's ability to pay.

I. The Health Care Crisis in the United States

The Uninsured: Thirty eight million people in the United States have no health care insurance and thus lack access to the most basic right in the United States: the right to affordable quality health care. An additional 56 million people are estimated to be underinsured or to lack health care insurance for some period of time in a given year, thus raising the specter of being without critical health care coverage when it may be most needed. Since 1980, the number of uninsured has risen by one million each year.

Nine million women of child bearing age have no health insurance. Twenty three and twenty six percent of black and hispanic women respectively are uninsured. Fifteen percent of the nation's children - 9.2 million- have no insurance. Employees of entire industries such as logging, hair stylists, roofing companies, taverns, mining and

medical offices, entertainers and sports are barred from insurance by the industry as high risk occupations (Paula Braveman et al.).

It is estimated that 20% of the American people are either totally without health coverage or lack coverage for some period of time in any given year. Three quarters of the uninsured are employed or are dependents of employees. One half of the working uninsured are employed by small business with 10 or fewer employees (Washington Post, 2/22/92). Many of the uninsured are self employed, part time and seasonal workers and workers whose employers do not choose to cover them.

The Underinsured: Even people who do have health insurance coverage live in constant fear that when they will need to use their health

insurance it will not cover their particular condition or the deductibles and co payments will be so great that they will not be able to afford the care they need. They are equally fearful that they will lose their decides to change or withdraw their coverage, raise coverage if their employer or insurance company their premiums, merge with another company or go out of business. Thirty per cent of employees reported in a recent poll that they were afraid to change jobs for fear of losing their health insurance. For individuals, typically women and children, whose health insurance coverage is dependent on their working spouse or parent, any change in that status -- divorce, widowhood or simply growing up -- poses a constant threat to their health care coverage (New York Times, 12/20/91).

Medicare and Medicaid: Efforts by

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government to supplement our work place oriented health care system have proved equally inadequate. Even with medicare, the elderly are paying almost 20% of their income on medical expenses. The average medicare household is spending \$3,305 on out of pocket costs for insurance premiums compared with \$1,589 in 1961 measured in 1991 dollars. A major part of these expenses are accounted for by nursing homes. Expenditures on hospitals have declined since 1961 and for physicians have increased only slightly. Many of the elderly cannot afford medicare's copayments and deductibles (Washington Post, 2/26/91). Medicaid covers 37% of the poor, down from 65% in the past decade and is available only from those physicians willing to accept medicaid assignment (Public Citizen Health Research Group Health Letter, 2/8/91). This is proving increasingly difficult for physicians since their reimbursement from medicaid is substantially lower than for their services to their other patients (Washington Post, 7/31/90). Moreover, Medicaid excludes the able bodied, childless non pregnant single adults or childless couples regardless of their income (EBRI, 7/90).

Limitations of Health Care Benefits: There are other barriers to health care in the United States. Today, most health care insurance is geared to acute illness and focusses, therefore, essentially on covering hospital and skilled nursing care costs and associated physician and other health care professionals' fees. There is almost no reimbursement for home care and other outpatient procedures nor for preventive tests and screening. Only 74% of physicians' services, 39% of dental services and 25% of prescription drugs are covered by health care insurance (Owl Observer, Oct-Dec. 1989).

Yet significant numbers of citizens are experiencing chronic health conditions which over the long term do not require hospitalization or acute interventions. Patients are discharged sicker and sooner from hospitals. They require a host of recuperative services most of which are not covered by their health insurance policies. The elderly's need for home care and assistance with normal activities of daily living are similarly not covered. A significant number of the elderly- and especially of elderly women- are poor, live solely on social security or have virtually no disposable income.

since women outlive men, are more apt to be in the lower income brackets and experience a greater share of chronic and disabling illnesses and conditions, older women have special health care concerns and requirements.

Many chronic disorders are the product of life style behaviors which have been largely ignored by our acute care illness oriented health care system. With our focus on acute medical care, we have paid little attention to preventive medicine including such things as health care information, wellness programs, nutrition and general fitness. As a result, too many individuals in our country have not had any, or inadequate access to immunizations, diagnostic tests, home care, hearing and vision care and prenatal care.

Escalating Health Care Costs: Finally, the most serious problem underlying our health care system are the runaway costs which our current system generates. United States health care costs (federal and state) increased from \$240 billion in 1980 to \$817 billion in 1991 (Washington Post, 1/20/91). The share of health care costs to GNP increased from 5.3% in 1960 to 9.1% in 1980 to 14% in 1991 (Ibid).

Between 1965 and 1987, the cost of benefits to employees rose from 2% of wages to 7% (E. Richard Brown, Sept. 1990). In 1990 individual employee contributions averaged \$396 a year up 43.5% from 1989, while family payments rose 29% to \$1068 a year (New York Times, 1/29/92). A Henry J. Kaiser Foundation Study estimated that by the end of the decade, an average family's total outlays for health care will jump from its present level of \$4,296 to \$9,397 (an 16.4% increase) (Washington Post, 12/11/91). For corporations, their health care costs have jumped from 14% of after tax profits to 19.4% (Brown, op. cit. p.6). Business is estimated to be paying an average of \$2,239 per family in health care costs (Washington Post, 12/11/91).

A major factor in the rising costs of American health care are the administrative costs incurred in the private health insurance segment of the industry which are passed on to consumers in the premiums which they or their corporate employer must pay.

The American College of Physicians estimates

that 20 to 30% of our total health care spending (\$110 billion out of \$600 billion in 1989) can be attributed to administrative costs. These costs, incurred by physicians, hospitals and nursing homes, are generated by recording, billing, processing, reviewing and auditing claims and include the costs of marketing health insurance policies, maintaining financial reserves and providing for corporate profits. States allow medigap insurers to retain a maximum of 40% and 25% respectively of individual and group policy premiums to cover their marketing and administrative costs, profits and past losses (New York Times, Jan/June 1990).

Hospitals and physicians alike are struggling with an overwhelmingly confusing administrative morass born of the need to comply with the record keeping and reimbursement requirements of these 1500 insurance providers as well as the federal and state medicare and medicaid authorities.

This paperwork for practicing physicians has been estimated as accounting for 40% of their gross income or \$31 billion in 1983 (American College of Physicians, 5/1/90). Hospitals, nursing homes and employers also maintain a substantial work force of health care administrators which is said to have grown by 171% between 1970 and 1982. One hospital executive in a small San Francisco hospital estimated that it cost his hospital \$7.8 million a year in administrative costs and 140 full time employees to comply with federal health care regulations (Wall Street Journal, 6/26/90). Moreover, hospitals and physicians struggle to cope with the uncertainty of which of their expenditures will be covered or rejected.

Economic and Social Impacts of Accelerating Health Care Costs: These escalating health care costs are giving rise to a series of cost containment steps taken by both business and insurance companies which are further adding to both the costs of health care and a declining coverage for individuals. These private sector efforts to constrain their health care expenditures have exacerbated current inadequacies of our health care system. In many cases, deductibles are now being assessed both against individual family members and on a per service basis. Annual life time benefit maximums are being added.

Big businesses have instituted managed care programs to control their health care costs which have resulted in substantial inroads on consumer's free choice of physicians. Ten years ago, 90% of US workers could go to any physician they wanted and undergo whatever procedures were deemed necessary. Today only 60% of workers have these choices and this percent is estimated will decline to 15% by the year 2000 (Ladies Home Journal, March, 1991). Large businesses who can afford to do so are becoming self insurers, thus defeating state risk pools for the uninsured since self insurers cannot be forced to join these pools (GAO, Feb. 1989).

Motivated by the competitive market, insurance companies are competing for better risks, offering them lower rates, based on actual claims experience rather than community based averages. Emphasis by insurance company payers on competition as a means of reducing costs have caused them to shift from their community based risk assessment policies into more individualized risk assessment policies. Competition among insurance companies today is for the most desirable risks which means for the healthiest individuals. This has resulted in substantial cut backs in eligibility, substantial premium increases for many companies and individuals and in many cases denials of insurance to whole companies as well as individuals either outright or through the increase of premium rates. Consequently, private health insurance plans available to various companies differ widely in the comprehensiveness of their benefits, premium costs and coverage limits (Griss, World Institute on Disability, 12/08/89). Small businesses with smaller numbers of employees have steadily confronted premiums well above average, far above what they can afford and substantially higher than those paid by large business who can more easily spread their risks over a larger employees populations (GAO, op.cit. p.22).

Finally, the variety of coverage among different employment based health care plans and skyrocketing health care costs are affecting both the productivity of workers as well as their mobility and skewing work forces increasingly towards part time and temporary workers as a means of cutting industry's health care bills (GAO, May, 1990).

Quality Care Impacts of Inadequate Health

Care Coverage: The most serious consequences of the lack of adequate health care coverage in our current health care system are its definable and visible adverse effects on accessibility to quality health care (CRS,6/88; GAO, 2/89; Bob Gris, 12/8/89). These adverse impacts of our health care inadequacies fall disproportionately on special groups, especially the low income families and women. In 1986, the poor had 217% fewer physician visits than did the non poor of the same health status (Health Affairs, Spring 1987). Five million women between the ages of 40 and 65 have no health care coverage. survey research consistently documents that people without insurance use much less health care than those with comparable health care needs who have insurance. Hospitals report that they are providing increasing volumes of uncompensated care. Yet one million patients are turned away from hospitals each year because of lack of insurance or other means of payment (New England Journal of Medicine, Jan 12, 1989). A recent study published in the Journal of the American Medicine Association shows that the uninsured have greater difficulty in seeing a doctor or being admitted to a hospital. It also shows that the insurance status of patients makes a profound difference in how well they are treated by doctors after they have been admitted to the hospital (Washington Post, 01/10/91).

The Physicians For A National Health Program have stated that in their judgment, the co-payments and deductibles endanger the health of the poor people, decrease use of vital in-patient's medical services, discourage preventive care and are unwieldy and expensive to administer (New England Journal of Medicine, 01/12/89).

II. Comparison of United States Health Care with Other Industrial Nations

The United States pays a high price for its mixed private public two tier health care system as respects both the costs and the quality of its health care system. The United States and the Union of South Africa are the only industrial nations of the world that have no universal health care system. Yet United States health care costs are the highest in the world.

Comparing the United States with Canada, for example, its nearest neighbor, The United States

spent 12% of GNP on health care as compared with 8.6% for Canada (6.8 and 6.1% respectively for Japan and Germany). In 1970, the year before Canada adopted its universal single payer health care system, the United States and Canada spent roughly 7.4% of GNP on their health care. In 1989, United States health care expenditures had grown by 4.5% to 11.6% of GNP compared to Canada's expenses of 8.9%, a growth rate of only 3.7%. One author argues that this difference in growth rate is actually due to the faster growth of Canadian GNP as a whole rather than to its slower health expenditure growth rate. Hoover, that author bases his figures a 20 year comparison period (1967-1987), which includes three years before the Canadian system became operational. Neuschler, "Is Canadian Style Government Health Insurance the answer for the United States health care cost and access woes?" (GAO, 06/91). In the Canadian per capital health care costs are 25% less than the United States and its physicians fees have decreased since 1971 by 18% while those in the United States increased during this period by 22% GAO, op. cit., p.41).

The GAO estimates that the administrative costs paid by the commercial insurance industry in the United States expended on managers, marketeers, lawyers and other administrators total 33.5% (\$130 billion) of its total health care costs compared with 3% in Canada. It is interesting that United States' medicare program reflected a similar 3% overhead figure (Ibid., p.7)

The United States trains and employs a higher ratio of specialists to primary care physicians than any other country and uses more tests, performs more surgical procedures and generally treats patients more intensively than other countries (Wall Street Journal, 4/17/90).

Yet, the health care outcomes for Americans are not as impressive as in other countries nor are the satisfaction levels of its citizens as high as in Canada for example. The United States ranks 24th among all industrial nations in keeping children alive during the first year of life. Only South Africa has a worst record. In addition, the United States ranks 11th in maternal mortality. Deaths in the United States from heart disease stand at 434 per thousand in 1985 while Canada's rate was 348 (Washington Post, 12/18/89). The United States

has the lowest life expectancy among six of the most highly industrialized nations in the world, two and a half to three times shorter than the life expectancy tables for Canada, Japan and Sweden. The United States ranks 8th in life expectancy, lower than Cuba. Finally, while Canada averages 85% immunization for diphtheria, polio and measles, the United States only averages 70% (Harvard Community Health Plan, 1990). Breaking these immunization figures down, the United States ranks 21st in immunization against measles and 100th in immunization against polio (Oregon Health, 2/27/91)).

Finally, despite the greater expenditures which the United States devotes to health care, its citizens are less satisfied with their health care system than citizens in the top ten industrialized countries. In a 1989 Lou Harris Poll, 89% of Americans were displeased with their health care system, saying that it needed "fundamental change or complete rebuilding" (Health Affairs, Summer, 1990).

III. Proposed Reforms to United States Health Care System

Health care in the United States has been variously viewed as a public good, a reward for certain conditions and a private right. Thus we have a public health system which rests on the recognition that the prevention of epidemics through the inspection of food, sewage and water, and more recently, government funding of children's immunizations and AIDS research are matters of public concern and therefore a proper subject of government attention and action. However, for the delivery of health care services to the bulk of our citizens, our approach has been much more pragmatic and market oriented.

Our current employment based health care insurance system has been influenced by the happenstance of Baylor University's need back in 1905 to staunch its deficits from its non paying patients which led it to launch an experimental health insurance program for Texas school teachers as a way to reimburse their health care costs. It was further solidified by the ad hoc decision of Congress to make payments for health insurance premiums deductible for corporations but not for individuals and by the need of American labor for a collective bargaining agenda. Thus was our system

of work place health insurance born, supplemented by the charity of public hospitals and government reimbursement for special groups such as veterans, the elderly, the disabled and certain groups of the poor deemed worthy of some health care protection.

There are two major legislative approaches being taken to health care reform by Congress: employer mandated "pay or play" bills which would maintain and improve the current public private multi tiered system and publicly funded and administered single payer bills which would replace the current network of 1500 insurance companies with a single government agency that would pay for all services but would maintain the current private delivery of health care services.

There are two principal employer mandated bills, one introduced by Representative Dan Rostenkowski in the House (HR 3205) and the other by majority leader Robert Mitchell in the Senate (S1252). Both these bills provide for universal health care coverage by mandating employers to offer health care benefits to their employees or to pay into a Public Health Fund created to provide health care to all those United States residents who are not covered by the private insurance system. These bills also specify the minimum health care benefits to be available to both employment based enrollees and to public fund enrollees and place limitations of \$2500/3000 on the contributions which individuals and families can be required to pay. However, employment based plan enrollees may receive additional benefits. Moreover, premiums paid by the two groups are differently calculated. Thus private employer plan premiums will continue to reflect current insurance company risk assessment practices based on the actual risk experience of the plan's enrollees as well as the administrative costs and profit needs of insurers and business. Premiums under the public fund, on the other hand, will be based on community risk assessments. The bills make it easier for small business to acquire insurance and make some changes to the insurance system so that it will better serve small business and limit its ability to refuse coverage to individuals.

In order to better control costs, these bills empower the Secretary of Health and Human Services to establish the nation's annual health care

expenditures and to establish provider payment rates for both hospitals, nursing homes and other facilities and for physicians and other health care professionals. A newly established federal Health Care Cost Containment Commission will determine the allocations of these overall expenditures to the various classes of providers as well as the allocations to be made for capital expenditures by hospital and other health care facilities and equipment. These allocations and payment rates are established for both the private and public fund providers. However, states are authorized to vary these rates for the medicare and public programs subject to the approval of the Secretary.

The principal arguments in favor of pay or play bills are that they extend coverage to all US residents, provide assistance to small business to acquire insurance, limit the ability of insurance companies to deny coverage for pre existing conditions and give the Secretary of Health and Human Services power to limit overall health care expenditures and provider rates. Their proponents claim that they are enactable today and constitute an important step towards a more comprehensive health care system. Their principal down sides are that they perpetuate the current multi tiered health care system with all of its attendant administrative costs, paperwork and red tape for both physicians and consumers and place no restraints on the premiums which insurance companies can charge for their health care policies.

The most comprehensive of the single payer health care reform bills (HR 1300) provides for a comprehensive universal health care system which is publicly funded and administered by the federal government (and in Senator Kerry's bill also by the states) and is available to all consumers in their own right simply by virtue of their residency in the United States. Like the employer mandated "pay or play" bills, these single payer bills stipulate the basic minimum health care benefit package to be provided to all United States residents although the single payer bills provide for much more comprehensive health care coverage including home care and long term care (It should be noted that in the Russo single payer bill, the health care benefit package is substantially more generous than either of the employer mandate bills and includes home and long term care). Similarly, they also provide for the Secretary of Health and Human Services to

establish the level and application of the annual health care expenditures for the nation and for each state as well as the amount and source of the revenues to be collected. The Secretary is also empowered to establish the operating and capital budgets for the national government and for the states based on states' review and comments. Finally, payments to hospitals and other facilities are to be made on the basis of annual operating budgets consistent with the national and state health budgets and approved by the Secretary. Payment rates for physician and other health care providers are also established by the Secretary.

These single payer health care bills differ from the employment mandated bills in several respects. They have eliminated the multi tiered health care systems and the enormous administrative costs which attach to the need to assess eligibility, compensate insurance companies' marketing costs and profits and comply with the diverse reimbursement and payment requirements of each of the 1500 insurers and of medicare and medicaid. Every individual has basic health care coverage based on their own status as a resident of this country. Health care providers have only one source of reimbursement to look to and individuals have identical health care policies and coverage. Their opponents criticize them primarily because of the fundamental change in our health care system which they encompass and for their alleged potential for government instituted health care rationing which it is feared will be more arbitrary than the current rationing of health care by private insurers and business and by the inability of individuals to afford health care.

Other health care proposals have been offered or are being developed.

President Bush has recently announced the administration's health care reform proposal which seeks to achieve universality through a system of health care tax credits without essentially changing the current employer based insurance system. This is far less comprehensive than any of the current pay or play proposals but like them reflects again the notion of allocating health care resources on the basis of market place principles of competition and so called consumer choice (New York Times, 1/5/92).

States have been experimenting with various ways to reduce their costs focussing primarily on reducing their medicaid expenditures. The most radical of these reforms is Oregon's health care rationing proposal. Under this proposal medicaid would be expanded to cover all Oregon citizens below the poverty line but on a sharply curtailed and limited basis. Oregon developed a list of some 700 medical procedures from which it identified some 587 procedures which will be available to medicaid recipients. The selection of these 587 procedures was based on an assessment of their cost relative to their effectiveness, their contribution, if any, to a patient's quality of life and to the well being of society. Such things as viral pneumonia, viral hepatitis, chronic bronchitis, certain types of asthma and certain back spasms were among the excluded procedures. In addition, these medicaid recipients will be required to enroll in some form of managed care organization in order to further reduce costs (New York Times, 2/2/592).

The critical question confronting the nation will be to choose between the type of health care reform it desires. In making that choice, we have at least two models to look to- the current United States experience with its mixed public and private multi payer employment based systems and Canada's single payer health care system which has been in operation since 1971.

In the United States, the results of our current system of allocating our health care resources through the relatively autonomous decisions of individual insurance companies, employers and health care providers has been a health care system whose costs are the highest among all the industrial nations in the world. It is a system that has favored the generation of specialists over generalists and family physicians, that has provided a higher range of high tech and quality care in urban and more densely populated centers than in smaller cities and towns and that has excluded large segments of our population from care. It is a system that has plunged the bulk of the insured population into fear and insecurity about whether they will have the necessary health care coverage when they need it and whether they will be able to afford the cost of health care once they have to use it.

Given our market place approach to health

care, these results are not surprising. While some employers and insurance companies negotiate lower fees from physicians and other health care providers, there is no single central authority with power to negotiate overall fees and charges with all health care providers. The results are substantial cost shifting among health care providers to make up for lower fees in one area by charging higher fees in another or refusing to serve lower paying patients or to treat higher risk more costly patients.

Competition among insurance companies for the consumer's health care dollar has not been reflected in competition in premium rates but in competition for the best possible risks. Individual risk assessment policies based on actual claims experience of the particular group have replaced the more traditional community based risks and has resulted in virtually foreclosing small businesses from obtaining affordable policies for their employees, has barred entire industries from health insurance and excluded many individuals from obtaining insurance because of pre-existing conditions or other high risk health conditions.

Efforts at cost containment have focussed primarily on the patients, reducing their "excess" health care usage through the imposition of user fees (co-payments and deductibles) and restrictions on hospital stays, requiring the use of managed care systems which have limited consumer choice of physicians and cutting back on dependents and retirees coverage as well as on overall coverage.

By contrast, the single payer system as it has functioned in Canada has substantially reduced Canada's health care costs below that of the United States and has also produced much higher satisfaction levels among Canadian citizens. The Canadian system is a mixed federal and provincial government system with the federal government laying down the basic requirements which must govern the health plans to be offered by the provinces. These plans must provide all medically necessary health care to all Canadian residents. They must be portable among the provinces and operated on a non profit basis and managed by public agencies accountable to the provincial governments. Thus each province is a separate insurer in Canada and has the discretion to cover other services such as prescription drugs for the elderly, dental care for children. The provinces

receive capitation grants from the federal government amounting to about 38% of their total costs, a 12 % decline from the original federal contribution. They are free to finance their health care from any source although user fees may not be imposed. Most of the provinces rely solely on general tax revenues. Four provinces impose small premium charges.

In Canada, the provincial governments make all the critical decisions about how much money will be spent annually on health costs, whether to insure services beyond those mandated by the federal government and how each will finance their health care plans. Canadian hospitals negotiate their annual global budgets with their provincial governments. Hospitals have no billing responsibilities which substantially cuts down their administrative expenses. Their capital budgets also require special Provincial government approval.

Physicians and health care professionals negotiate the fees they can charge with their provincial governments which also control the number of new medical students and interns and the ratio of specialists to generalists. Physicians submit their bills monthly to the provincial government which again substantially reduces the amount of paper work and administration which they have to go through in order to get reimbursed for their services. They are not permitted to engage in balanced billing. Insurance companies may not offer policies covering the mandated government health care package but may offer coverage on other health care services not included in the mandated coverage.

There are some downsides to the Canadian health care system. Canadian patients do not receive the same intensive high tech medicine as do American citizens. It is generally agreed that the United States has a more rapid adoption of high technology health care equipment than Canada. For example, in Canada, there are only three hospitals per three million persons equipped to perform heart surgery. The Canadian Health Ministry, in consultation with cardia surgeons, deliberately limited heart surgery wards in order to concentrate procedures and experience at a few centers. Some hospitals may be less comfortable for patients, with hand cranked hospital beds and may use treatments causing more discomfort for patients. Physicians

lacking CAT scans must perform their examinations manually. There are substantially fewer cardiac catheterization labs, lithotriplers (for crushing kidney stones) and MRI scanners per patient in Canada than in the United States.

It is also reported that Canadian physicians employ more conservative treatment protocols. For example, United States physicians tend to advise cholesterol testing for anyone over 20 and treat patients with cholesterol levels in excess of 200. Canadian physicians, on the other hand, test only those persons with a risk of heart disease and do not pursue treatment with levels under 256. They claim that medical studies support these more conservative protocols. It is not clear whether these practice differences have resulted from Canada's single payer system or simply reflect traditional medical practice differences between the two countries.

Finally, there are waiting lists for non emergency access to hospital for certain types of procedures. Canadian patients must wait up to three months for cataract surgery, three to six months for coronary bypass and five months for hip replacements. In addition, Canadians may have to travel some distances for certain procedures. While these travel expenses are reimbursed for patients, they are not for families (Washington Post, 4/30/91; Wall Street Journal, 12.32.91; Neuschler).

However, for all of these real and alleged drawbacks, both Canadians and the Canadian health care establishment are wholly supportive of their system (Conklin, David, 1991). Every Canadian is insured from birth or upon entry into the country; no Canadian is denied coverage for any health or financial reason; the benefits provided Canadians are more comprehensive than those typically provided in the United States and the cost of health care is lower per capita in Canada than in the United States.

IV. Need for Consumer Participation in Health Care Debate

While most policy makers agree there is a need for health care reform in the United States, there is no consensus on how to change the system. A Wall Street Journal NBC poll found that 69% of voters support universal health care even if it takes

a tax increase to pay for it. Non profit, professional, religious, consumer and public interest groups and unions are unanimous that the United States must adopt a universal health care system. They are divided, however, on whether this legislation should be single payer or pay or play or some other system. Many are still working on which universal health care plan they will support. The AFL CIO decided not to take a position and to leave their members free to take their own positions.

A strong public interest coalition has formed to push for single payer legislation. CFA, Consumers Union and Public Citizen as well as seniors' organizations such as the National Council of Senior Citizens and the Older Women's League, plus the National Association of Social Workers and the United Church of Christ together with AFSCME and other unions belong to this coalition (The contact for information about this coalition is Citizens Action, 1300 Conn Av. NW., Washington, DC, 20036). The National Consumers League is the only traditional consumer organizations which is not a part of this coalition. It is a member of Health Care America which was originally formed to promote Senator Mitchell's pay or play bill. While composed principal of health care oriented associations, Health Care America does include some non health care related members such as the Children's Defense Fund, March of Dimes, National Council of Negro Women, National Hispanic Council on Aging, AAUP and the Episcopal Church. Other coalitions have formed to promote the pay or play bills. These tend to be heavily weighted toward business, insurance and health care related professional groups.

AARP has put forward a draft proposal which it claims is a combination of both single payer and pay or play. AARP's plan would establish an improved and expanded Medicare plan universally available to all persons with monthly premiums and limited deductibles, coinsurance and copayments. However, AARP's plan would expressly authorize the continuation of private insurance employer sponsored plans which offered the same or improved benefits. Thus AARP's plan is essentially a pay or play bill since it envisages a two tiered health care system, one public required to serve all individuals and one private and free to set premiums which in effect exclude individuals with

high risk health care potential. AARP's board of directors has not yet taken final action on this proposed plan.

ACCI has played virtually not role in this critical health care debate. Indeed health care issues do not seem to have caught the research attention of ACCI members to any large extent. Its last two research conferences in 1988 and 1990, contained no discussion of the health care system as a whole or of any issues of access, coverage, costs or insurance risk assessment practices.

The 1988 research conference papers were totally silent on any of these health care issues and in the 1990 research conference only four out of the forty nine papers presented dealt with health care at all. These looked only at issues of health claims on labelling regulations, consumer awareness of medigap insurance and the need for consumer information about HMOs and health care quality (Mayer, Robert, ACCI, 1990).

Over the years, consumer professionals and scholars have been calling on ACCI members to enlarge their traditional economic market place focus to encompass issues of human welfare and social justice.

In the 1988 research conference, Helen Nelson called upon consumer researchers to go beyond the traditional narrow interpretation of the consumer rights around which the research conference was organized (Nelson, Helen, ACCI, 1989). Commenting on the papers presented on the Right to Safety, she pointed out that this right was much broader than product safety to which these researchers had confined themselves. Researchers, she said, need to be dealing with a much larger conception of safety than this conventional one and must ask such questions as "How 'safe' is a consumer who has no access to health care services. How 'safe' is the consumer who has no entitlement to the delivery of medical Services?" (Nelson, Helen, ACCI, 1988). Her voice and perceptive questions about health care constituted the only single reference to health care I could find in the 940 pages of papers presented at this conference.

In the 1990 research conference, both Esther Peterson and Bob Mayer, echoing Helen Nelson's

plea, called on the consumer movement to enlarge its concerns beyond what Mrs. Peterson called "the nickel and dime view of our interests". Mrs Peterson urged ACCI members to focus their research on issues "which would move the public into consciousness of the consumer movement as pursuing responsible and involved citizenship". "Isn't it time" she asked, "we come up with an accepted social index that measures health, literacy, shelter, items of well being in place of economic indices that do not measure where we are in human terms. While society's major institutions are still fixed on defining and measuring value in economic terms, we witness an enlargement of how ordinary people define their consumer interest, from the self interest of the best buy to the wider interest in a fair, safe and healthy world. (Peterson, Esther, ACCI, 1991)" Bob Mayer in his Overview stressed the same theme. He pointed out that enhancing consumer choice is not simply an economic market enhancing phenomenon but is compatible with, and instrumental to, achieving widely shared social goals pertaining to justice" (Mayer, Robert). Both Scott Maynes and Ed Metzen in their future research recommendations urged ACCI members to broaden their concepts of values and to range beyond what can be statistically demonstrated and involve themselves in qualitative research questions (Maynes, E. Scott).

These voices reflect a phenomenon in the consumer movement which has been of concern to me for a long time. Back in the 1970s, Michael Pertshuk was still viewing the consumer movement in protectionist terms as a fight to protect consumers from corporate abuses in the market place while other consumers were organizing themselves outside of the traditional consumer movement to deal with issues of the environment, social security, disability, civil rights, women's issues and the issues of older persons. These groups sensed that the problems they were concerned with did not fit so easily into the traditional consumer movement's "win-lose", "we-they", "white and black hat" syndrome framework. They recognized that it was not so easy to evoke public outrage when the target was not so much corporate misdeeds as the need to balance and weigh conflicting interests and demands. (This was a point of view I expressed back in 1982 to ACCI (ACCI, 1982)). While the traditional consumer movement eventually made common cause with

many of these groups and frequently work with them in coalitions, consumer research has by and large not made the same shift.

As the debate on health care reform develops, it is time for ACCI to take a much needed leadership in analyzing and illuminating these issues so that consumer and public interest organizations supporting universal health care can be assured that the program they support will in fact provide consumers with cost effective and realistic access to comprehensive quality health services without regard to their ability to pay.

There are important questions which ACCI researchers need to address.

Canadian Health Care System Vulnerabilities: While the Canadian health care system has been cited by many as a model for the United States, questions have been raised about the efficacy of the Canadian system and its applicability to the United States. Its financial stability is challenged by some as are the impacts on the quality of health care of its efforts to impose cost constraints on hospitals and other facilities. How do waiting periods for non emergency surgery affect consumers and to what extent is Canada's more cautious acceptance of high technology hurting the quality of care available to Canadians. This is an enormously fertile field for ACCI researchers and their contribution of the debate can be substantial.

Centralization and Decentralization of US Health Care System: In the United States, one of the major debates that will arise with either of the reform systems now being discussed concerns the extent to which the United States health care system should be decentralized. We have had experiences in this country with both centralized and decentralized national programs. Social Security and medicare, for example, have been nationally administered while unemployment compensation and medicaid have been largely relegated to the states. These are just a few examples of our mixed federal state system. Plenty of studies have been made of federal state programs in terms of their relative efficiency, costs, etc. I believe, however, that we need research which focusses on how these various systems have impacted consumer welfare (as respects such values as consumer control, choice, confidence, quality of services etc.) and

whether we can learn anything from our own history that will help us determine how we want to administer our national health care system.

Efficacy of Managed Care Systems: Cost containment is a major goal of health care reform. HMOs and PPOs are regarded by some as important cost containment mechanisms in the United States and are now being considered by Canada. The advantages and disadvantages of these managed care programs need to be analyzed within the context of their impact on consumer choice, quality of care and access as much as on their costs. It is consumer researchers who have the insights and sensitivities to frame the questions which need to be answered in appraising whether HMOs have hurt or benefitted consumers access to quality health care.

Scope of Health Care Benefits: Our current health care system has been skewed in favor of acute illness rather than preventive care. It has also poorly served the health care problems of women, older persons, and ethnic and racial minorities. Thus a critical feature of any health care reform plan is the scope of its benefit coverage. The disparate incidence of illnesses among different population groups in this country has not been reflected in health care research and must not be ignored in the drafting of health care benefits. The definition of long term care, including home care and personal services, is another question of critical importance to the disabled, the chronically ill and to the elderly and must be resolved on the basis of hard facts concerning incidence, cost of alternative treatment and quality of life for consumers. Finally the coverage of mental health is another important issue which has not received major attention in the consumer literature. Yet the incidence of mental health problems (drug abuse, depression, stress as well as the more common mental health illnesses) is widespread among the youth, among the elderly and probably generally throughout the population. It is essential that consumer researchers, with their special sensitivities towards these consumer groups, examine their special health care needs, explore the health care experience of other industrial nations and define a health care benefit package which in fact corresponds to the principal and most frequent health care needs of all Americans.

Financial Impact on Consumers: Because a

single payer health care system will create an essentially new health care system so far as its financing and administration is concerned, a central question to be answered is its financial impact on individuals and families as compared with their current health care situation. This is an analysis that was never made as respective the abortive catastrophic health care legislation which was subsequently repealed because consumers discovered that under the legislation many of them would have to pay more for less coverage than they already had. It is essential that this mistake not be repeated with the current health care reform bills now pending before Congress. I know of no other research group better qualified than ACCI members to design a comparative research study of how families and individuals today who have top insurance coverage, mediocre coverage, medicare and medicaid fare under today's system and compare their situation under a single payer system, looking at such variables as coverage, costs, security and stability of coverage.

I believe that Ed Metzen was right when he proposed that ACCI should devote its annual research conferences to single issues so that it can in fact explore these issues in depth. Nothing could be more timely than for ACCI to devote its next conference to the issues of our health care system. Through its call for papers, it can ensure that the research will be relevant to the current debate. Its papers can make an important contribution to that debate. By providing relevant data on the consumers interest in health care, ACCI's researchers can ensure that the interests of consumers and not just of business and the health care industry will be taken into account in framing the ultimate reform legislation.

References

Braverman, Paula, et al., "Adverse Outcome and Lack of Health Insurance Among Members of the Eight County Area of California, 1982-86" New England Journal of Medicine, vol. 321, p. 508 (Aug. 24, 1989).

Washington Post, 2-29-92, p.A10.

- New York Times, 12/20/91, p.1.
- Washington Post, 2.26.91, p.A3.
- "Who's to Blame?", Part II, Public Citizen Health Research Group Health Letter, p.8 (2/8/91).
- Washington Post, 7/31/90; American College of Physicians, "Access to Health Care Position Paper", Annals of Internal Medicine, 5/1/90, vol.12, p.646.
- EBRI, Issues Brief, July, 1990, pp.4-5; Senior Citizen News, January, 1989, p.5.
- Owl Observer, Oct-Dec. 1989, p.5, Findings of Pepper Commission report.
- Washington Post, Health Magazine, 1/20/91. p.11.
- Brown, E. Richard (Sept. 1990). "The Uninsured and Rising Health Costs: The Problem and What We Can Do About Them," p.6.
- New York Times, 1/29/91, p.C1.
- Washington Post, 12/11/91, p.A15.
- Brown, op. cit., p.6.
- New York Times, Jan-June, 1990.
- American College of Physicians, "Universal Access to Health Care in America: A Moral and Medical Imperative": Annals of Internal Medicine, vol. 112, p.648 (5/1/90).
- Wall Street Journal, 6/26/90.
- Rock, Andrew, "The Crushing Costs of Health Care"; Ladies Home Journal, March 1991, p.125, 127.
- GAO, World Institute on Disability; Limitations on Private Health Insurance", Access to Health Care, vol. 3, p.16 at 22 (12/8/89).
- GAO, op. cit. p.22.
- GAO, Health Insurance: Cost Increases, Coverage Limitations and Cost Shifting, (May, 1990), pp.2-3.
- CRS, Health Insurance and the Uninsured: Background Data and Analysis, June, 1988; GAO, Health Insurance: An Overview of the Working Uninsured, (Feb. 1989), p.12; and Bob Gris, World Institute on Disability, "Limitations on Private Health Insurance:", Access To Health Care, vols. 3 & 4, p.16 (12/8/89).
- Freeman, Beldon et al., "Americans Report on Their Access to Health Care"; Health Affairs, vol. 6, p.8 at 10, 12 (Spring 1987).
- Himmelstein et al., "A National Health Program For The United States", New England Journal of Medicine, vol. 320, p.102 (01/12/89).
- Washington Post, 1/19/91, p.1.
- Himmelstein, D., & Woolhandler, S.; "A National Health Program For The United States: New England Journal of Medicine, vol. 320, p.101 (1/12/89).
- GAO, Canadian Health Insurance: Lessons For the United States, GAO/HRD 91-90, p.3 (June 1991).
- GAO, Canadian Health Insurance, op.cit., p.41.
- Ibid. p.7.
- Taylor, Humphrey; "US Health Care: Built For Waste", Wall Street Journal (4/17/90).
- OECD data cited in Washington Post, 12-18-89, p.1.
- Harvard Community Health Plan, Annual Report, 1990, pp.4-5.
- Oregon Health Action Campaign, fact sheet (2/27/91).
- Glendon et al.; "Satisfaction With Health Systems in Ten Nations", Health Affairs, Summer 1990, p.171.
- New York Times, 1/5/93, p.1.
- New York Times, 2/25/92, p.1.

Washington Post (4/30/91), p.1, 16, & (7/17/91).
p.9; Wall Street Journal, (12/31/91) p.1;
Neuschler, op. cit. pp.57-58.

Conklin, David, "Health Care: What Can the
United States and Canada Learn From Each
Other?", National Planning Association,
National Health Care: Is It The Answer?, (US
Canada Outlook, 1991), p.3.

Mayer, Robert, Ed. "Enhancing Consumer
Choice", Proceedings of the Second
International Conference on Research in the
Consumer Interest, (ACCI, 1990) Papers no.7
& 19-21, pp. 79 & 221-239.

Nelson, Helen, "Reflections on Research in the
Consumer Interest," in E. Scott Maynes, "The
Frontier of Research in the Consumer
Interest," Proceedings of the International
Conference of Research in the Consumer
Interest, (ACCI, 1989), p.97.

Peterson, Esther, "Ethical Dimensions of Consumer
Choice," Mayer, Robert, Ed., Enhancing
Consumer Choice: Proceedings of the Second
International Conference on Research in the
Consumer Interest, (ACCI, 1991) p.563.

Mayer, Robert, "An Introductory Overview", in
Enhancing Consumer Choice, op. cit. p.ix.

Maynes, E. Scott, "The Becker 'Revolution':
Challenges For Tomorrow's Researchers and
Educators in the Consumer Interest," &
Metzen, Edward J., "The Future of Consumer
Policy Research," Frontiers of Consumer
Research, op. cit. pp.569, 573.

Jones, Mary Gardiner, "The Consumer Movement
in Transition, Threats, New Dimensions and
Potential Responses," ACCI Proceedings:
Career Competency, Consumer Education, and
Consumer Research, (ACCI, 1982) p.295,
296.

Relative Risk Aversion and Optimal Credit Use With Uncertain Income

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Borrowing may be optimal if real income is expected to increase. If income growth is uncertain, optimal credit use is not obvious. A two period model of consumption for determining optimal credit use is presented. The impact of a utility function parameter, relative risk aversion, is analyzed by simulation to obtain utility maximizing levels of credit. The results may be useful for financial counselors and educators, as well as for insight into empirical patterns of credit use.

Introduction

Economic investment theory models developed by Fisher (1930) and Hirshleifer (1970), suggest consumers may increase market opportunities and their utility through judicious selection of debts and assets (Herendeen, 1975). If a consumer is uncertain about future income, a small sustained growth (decrease) in real income or a substantial one-time increase (decline) might lead to borrowing (or saving) to smooth consumption over life cycle. Young consumers, especially students, and other families with temporarily low income might find borrowing rational. Clearly, the use of consumer credit makes it possible for families and individuals to have the immediate consumption of goods and services and thus raise their level of living and satisfaction. However, the dramatic growth of consumer installment debt and the holding and use of credit cards from the past two decades (Eastwood, 1985; Canner 1986), has led financial planners and educators to express alarm regarding whether consumers are becoming debt-ridden and overextended. The purpose of this paper is to

describe a model for determining optimal credit use decisions with uncertain future income facing consumers. The vehicle of analysis is the familiar two-period model of consumption. Analysis is confined to credit for current consumption.

The Literature

There has been extensive discussion in the literature of optimal saving (borrowing) and consumption behavior under uncertainty either in the context of infinite time horizon or in two-period or multiperiod intertemporal models (e.g., Leland, 1968; Levhari & Srinivasan, 1969; Sandmo, 1970; Mirman, 1971; Dreze & Modigliani, 1972; Hey, 1974; Sibley, 1975; Salyer, 1988). In general, the authors analyze one or two variables at a time, assuming a value for each of the other parameters. For example, in two-period models the effects of income and interest rate uncertainty on borrowing (or saving) decisions are analyzed, given an assumption of a certain lifetime. Infinite horizon or finite horizon models explore effects of the discount factor (lifetime uncertainty) on borrowing (or saving) behavior while assuming absence of income and interest rate uncertainty.

In the discussion of income uncertainty and saving behavior, it is assumed that the consumer's beliefs about the value of future income can be summarized in a subjective probability density function. On the basis of this the consumer maximizes expected utility of consumption. Leland (1968) uses a two-period model of consumption to demonstrate the effect of uncertainty on saving and concludes that with a additive utility function and the assumption of decreasing absolute risk aversion, the precautionary demand for saving is a positive

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function of uncertainty. Sandmo (1970) discusses the effects of increased riskiness of future income on present consumption in a two-period model and proves that increased uncertainty about future income decreases consumption (increases saving). Sibley (1975) extends a two-period result of the effects on optimal savings of increased riskiness in the future income due to Leland (1968) to the multiperiods case. He suggests that increased wage uncertainty raises or lowers saving according to whether the third derivative of the utility function is positive or negative. Since the plausible requirement that the consumer's utility function display decreasing absolute risk aversion implies a positive third derivative, this establishes a presumption that optimal saving increases with wage uncertainty (Sibley, 1975). For the case of a constant (but negative) elasticity utility function, Levhari and Srinivasan (1969) shows that optimal savings can increase with increasing uncertainty. However, those literature mostly emphasize on the effects of subjective probability density function as a projection of uncertain future income on saving (or borrowing) behavior. No study has been done incorporating possible factors such as level of risk aversion, interest rate, income, and income growth rate into a model to demonstrate effects of these uncertainties on optimal borrowing behavior in terms of specific behavior.

The present study includes factors which influences optimal borrowing decisions. Kinsey and Lane (1978) point out when consumption is accompanied by the use of consumer credit, utility maximization may be viewed in the global sense, thus a life cycle approach to the allocation of income, consumption, and saving (borrowing) is appropriate. Additionally, by appropriate interpretation, two-period models can describe completely the individual's resource allocation problem during any one period of his lifetime, as long as interest is confined to consumption in that period and to his total consumption in all future periods (Hey, 1974). With additional assumptions on certain risk properties of utility functions and extensive discussion about the value of utility function parameter both under certainty and uncertainty, a two-period model with uncertainty for determining optimal credit use facing consumers is presented and illustrated with numerical analysis. The focus of this paper is on the relationship

between optimal credit use and relative risk aversion¹. Implications for a life cycle model are then discussed.

Factors affecting optimal credit use include the expected growth rate of real income, the variance of future income, the consumer's utility function (e.g., the parameter of risk aversion), the real interest rate and the consumer's personal discount rate.

A Two-Period Model Of Consumption

To begin, consider a simple consumption and saving model containing two periods: current year and next year (Bryant, 1990, p. 87). Assume that the household will not exist "the year after the next year", and that it leaves no inheritances or unpaid loans when it departs the scene. Assume, moreover, that the household is not certain what its next year income will be, but knows that next year income will increase at growth rate "g" with probability "p", or remain the same as current year income with probability "1-p". Thus the intertemporal household model contains three parts: the household's intertemporal budget constraint, the household's preferences, and the behavioral hypothesis that it makes decisions as to maximize the total expected utility (T) for the two periods. Because the household is uncertain about the next year income, he/she will make his/her borrowing (or saving) decision in conjunction with his/her known first period income. The second period consumption will, of course, be a random variable, dependent on the actual value of second period income which is assumed to be affected by income growth rate (or decrease rate) and the probability of that income growth occurs, and also dependent on the interest rate of borrowing (or saving). C_1 and C_{2a} represent consumption in these states. Finally, consumers are assumed to repay the loan in full in second period. Mathematically, the problem can be formulated as:

$$T = U(C_1) + \frac{PU(C_2) + (1-P)U(C_{2a})}{(1+\rho)} \quad (1)$$

The constraints are:

$$\begin{aligned} C_1 &= I - S \\ C_2 &= (1+g)*I + (1+r)*S \end{aligned} \quad (2)$$

$$C_{2a} = I + (1+r)*S \quad (4)$$

Variables:

T = Total two period utility

I = Year 1 income

Year 2 income = $(1+g)*I$ (if income increases in that year),

otherwise, Year 2 income = Year 1 income

C_1 = Consumption in year 1

S = The amount of savings in year 1 (negative value means borrowing.)

C_2 = Consumption in year 2 if real income in year 2 increases

C_{2a} = Consumption in year 2 if real income in year 2 does not increase

g = Growth rate in real income

r = Real interest rate (Note that r may be higher for $S < 0$, i.e., borrowing, than for $S > 0$)

P = Probability that real income increases

q = personal discount factor

A consumer may discount utility from future consumption because of the possibility that he/she may not be alive then, or because of other possible changes in capacity to derive utility from consumption. Discounting because of the risk of death should be small for a young adult. For analysis of savings/credit, the approximate effect of a nonzero personal discount rate is to reduce the real interest rate in the optimal solutions shown below, so that instead of an interest of r, the consumer in effect faces an interest rate of approximately $r-q$. For the remainder of this paper, q is assumed to equal zero. If q is positive rather than zero, a consumer would save less or borrow more for any given set of values of other parameters.

The intertemporal budget constraint with uncertainty is not so simple as that for the certainty case. It is nonlinear and represented by the above three constraint equations (2), (3), and (4).

Household preference is represented by its utility function $U(C_t)$. The literature show that most studies of intertemporal consumption have used a constant elasticity utility function (Hurd, 1989) which is time separable and additive:

$$U = C^{1-x} / (1-x) \quad (5)$$

When this type of utility function is used for analysis of risk, the parameter x is relative risk aversion. The elasticity of marginal utility with respect to consumption is $-x$. The elasticity of intertemporal substitution in consumption is equal to $1/x$. C is consumption per time period. (The

analysis could allow for other scenarios, but the discussion is limited to this scenarios because it is the most plausible scenario for borrowing for current consumption to be rational).

Estimates of Relative Risk Aversion

Grossman and Shiller (1981) have given x an interpretation as "... a measure of the concavity of the utility function or the disutility of consumption fluctuations" (Grossman and Shiller, 1981, p.224). The higher the value of x, the more risk averse is the consumer, and the more rapidly marginal utility decreases as consumption or wealth increases. The analysis of economic behavior under uncertainty uses relative risk aversion extensively. For intertemporal consumption, empirical estimates of x range from just 1 (Skinner, 1985) to 15 (Hall, 1988). Other estimates were between these two values.

There has been no credible estimation of the utility function parameter, x, the relative risk aversion, because:

- many households face liquidity constraints;
- Some authors have not carefully separated the concept of the personal discount factor, q; and
- The datasets used for empirical analyses did not contain appropriate variables.

However, although it is often assumed that a consumer cannot identify his or her utility function explicitly, it may be possible to construct hypothetical examples that allow one to intuitively identify a unique utility function parameter. It is possible to create a scenario to obtain insight into the similar parameter for the intertemporal utility function. To obtain some insight into plausible values of relative risk aversion x, consider the following *hypothetical* situation: You are 20 years old, and know with certainty that you will live to be 100 in good health. Everything about your personal situation will remain the same for the next 80 years. You want to spend all of your wealth by the day of your death. Your non-asset income will be \$20,000 per year in real (constant dollar) terms. You can obtain 6% per year after inflation and taxes on investments. Table 1 shows optimal consumption paths for different values of x, assuming $q=0$, $r=.06$.

Based on the hypothetical example, a value of $x=1$ (which corresponds to a natural logarithm utility function) would seem extremely miserly, as

you would spend only \$4,323 of your \$20,000 income at age 20 in order to enjoy \$457,382 of consumption the last year of your life. A value of $x=6$ might be representative of the typical American consumer, as the consumer would spend \$16,929 out of his or her \$20,000 income at age 20, and could spend \$36,817 at age 100. It seems likely that most Americans would have a value of x between 4 and 8.

Kimball's (1988) hypothetical example for relative risk aversion seems to lead many people to conclude that they have a value of relative risk aversion between 4 and 8 (Hanna, 1988). The utility function $U(w)$, and the expected utility $EU(w)$ are specified as follows,

$$U(w) = \frac{W^{(1-x)}}{(1-x)} \quad (6)$$

$$EU(w) = \sum P_i U(w_i) \quad (7)$$

where x = relative risk aversion level
 w = total wealth

A modified version of Kimball's (1988) example developed by Hanna (1988), could explain the concept of relative risk aversion in the context used.

Assume that you have one year to live, and may choose an investment to provide you with your consumption for the next year. Once you choose, it will be impossible for you to obtain income from any other source. You have no assets of any kind. You may choose one of two plans: A or B. Plan A provides you with consumption of \$50,000 for the year, while plan B involves a gamble. If you choose plan B, the government in effect flips a coin, and there is a fifty percent chance of having consumption of \$100,000, and a fifty percent chance of some lower consumption I. At what level of I would you be indifferent between Plan B and Plan A.

Table 2 shows how your answer corresponds to your level of relative risk aversion.

Economists have estimated average values of relative risk aversion ranging from about one to over 10. In the context of the expected utility model, relative risk aversion relates to the extra utility of increased consumption if the gamble pays

off compared to the lost utility because of decreased utility if you lose the gamble. For instance, if you have a relative risk aversion level of 4, you value the gain of utility from increasing your consumption from \$50,000 to \$100,000 the same as the loss of utility from decreasing your consumption from \$50,000 to \$40,548 (Hanna, 1988, p. 65). The assumption of constant relative risk aversion implies that the examples in Tables 1 and 2 are independent of the absolute levels of consumption used. For instance, multiplying or dividing the consumption levels by two would give the same results.

By substituting the constant elasticity utility function in equation (7) into equation (6), we can obtain the optimal amount of saving in terms of year 1 income, interest rate, income growth rate, and probability of that income increases. To give some intuitive insight into optimal credit first, optimal credit with perfect certainty will be examined.

Optimal Credit with Perfect Certainty

If a consumer is certain that real income will increase with a growth rate g , and the consumer faces a real interest rate r , Equation 8 gives the optimal savings as a proportion of year 1 income. The consumer's relative risk aversion is x . For particular values of r and g , the greater the relative risk aversion, the more the consumer should borrow. This seemingly paradoxical result is due to the fact that the two period model with certainty involves no risk, but only intertemporal allocation.

If the consumer faces a higher interest rate for borrowing than for saving, there may be some growth rates for which neither borrowing nor saving is optimal. If the ratio is negative, borrowing is optimal.

$$\frac{S}{I} = \frac{(1+r)^{\frac{1}{x}} - (1+g)}{(1+r)^{\frac{1}{x}} + (1+r)} \quad (8)$$

The natural log utility function ($U = \ln[C]$) has been used frequently, and corresponds to a relative risk aversion level of 1.0. Based on the example from Table 1, the log utility function implies extremely miserly behavior. It is simple to

Table 1
Optimal Intertemporal Consumption by Relative Risk Aversion, Hypothetical Example.

Age	x=1	x=2	x=3	x=4	x=5	x=6	x=20
20	4,323	11,104	13,942	15,421	16,323	16,929	19,073
30	7,742	14,859	16,931	17,840	18,341	18,656	19,637
40	13,865	19,885	20,560	20,637	20,608	20,558	20,217
50	24,831	26,611	24,968	23,874	23,155	22,655	20,815
60	44,468	35,611	30,320	27,618	26,017	24,966	21,431
70	78,635	47,656	36,820	31,948	29,233	27,512	22,064
80	141,614	63,774	44,713	36,959	32,846	30,318	22,716
90	255,400	85,344	54,299	42,754	36,905	33,410	23,388
100	457,382	114,210	65,939	49,459	41,467	36,817	24,079

analyze. Substituting the value of $x = 1$ in Equation 8, Equation 9 is obtained.

Table 2
Intuitive Example of Relative Risk Aversion

Relative Risk Aversion	Lowest Value of I
0	0
1	25,000
2	33,333
3	37,796
4	40,548
6	43,665
10	46,299
20	48,209

$$\frac{S}{I} = \frac{r-g}{2(1+r)} \quad (9)$$

Note that if g is greater than r , saving is negative, so that some borrowing is optimal. For a given value of r , as g increases, the optimal amount to borrow will increase. For instance, if $g=.2$ and $r=.1$ then $S/I = -4.5\%$. If this year's income is \$10,000, the optimal amount to borrow is \$450.

For other values of x , Equation 8 is somewhat complicated. However, an intuitive sense of the patterns can be obtained by using the approximation $(1+r)^{(1/x)} = 1+r/x$, resulting in Equation 10.

$$\frac{S}{I} = \frac{\frac{r}{x} - g}{2+r+\frac{r}{x}} \quad (10)$$

With a "reasonable" value for x of 6 (based on the two hypothetical examples), if the real interest rate is less than six times the real growth rate, some borrowing is optimal. For a real interest rate of 14.1% (e.g., credit card with 5% inflation), a real growth rate of 3% would imply some credit use.

For a particular value of g , as r increases, S/I increases. If S/I is negative, as r increases, the optimal amount to borrow decreases. If $g = .2$, $x = 6$ and $r=.1$, then $S/I = -8.7\%$. For $g=.2$, $x=6$ and $r=.2$, $S/I = -7.5\%$, compared to -8.7% with $r=.1$. For given values of I , g and r , as x increases, the optimal loan increases.

Optimal Credit with Uncertainty

There is no simple, closed analytical solution for optimal savings or credit with uncertainty. Therefore, simulations were used to find optimal savings/credit

Simulations of Optimal Credit Use

Equations 1 through 4 were used with simulations to find the value of S that maximized expected lifetime utility for particular values of the parameters. In this section, we shall discuss and

illustrate effects of the utility function parameter, x , relative risk aversion, on optimal credit use and relevant saving and consumption behavior. Two graphs are produced to help illustrate effects of these parameters by using a numerical simulation technique. In order to focus on scenarios with borrowing, it was assumed that the consumer faced either constant real income or a real income growth rate g with a probability p .

In the cases of certainty (i.e., probability of income increases equals one), the greater the relative risk aversion, the less the consumer will save, or the more the consumer will borrow. The relative risk aversion is related to how much more utility the consumer will lose due to low consumption in year 1 than he/she will gain from higher consumption in year 2. For any given real income increase, the consumer will borrow more in order to smooth out consumption as much as is justified by the utility function and the real interest rate on loans. When uncertainty is added to the total period utility function (i.e., probability of income increases between zero and one), the borrowing-relative risk aversion relationship observed for certainty does not always hold. The simulations were based on the following assumptions:

- The real interest rate on loans = 14.095% (e.g., nominal rate of 19.8% with 5% inflation.)
- The real interest rate on savings = 1% (e.g., nominal interest rate of 8.4%, subject to 28% tax rate and 5% inflation.)
- Expected utility from all possible borrowing levels (at 14.095%) is compared to expected utility from all possible saving levels (at 1%) and optimal saving/borrowing is that which produces highest expected utility.

Figure 1 shows the relationship between the optimal ratio of amount saved in year 1 to year 1 income and relative risk aversion, assuming that there is a chance that real income will remain the same in year 2, and a chance that real income will increase by 12% in year 2. A 12% real increase in income might be possible with a good promotion in a job or a job change. For $p=100\%$ that real income will increase by 12%, higher values of relative risk aversion (x) are associated with *higher* amounts borrowed. For relative risk aversion of 6.0, optimal savings as a percent of year 1 income = -4.5%. For instance, if year 1 income =

\$20,000 and the consumer is certain that real income will increase by 12%, he/she should borrow \$900.

For probabilities less than 100%, there is a U-shaped pattern between optimal savings (borrowing) and relative risk aversion. For instance, for $p=70\%$, for relative risk aversion = 1.0, optimal savings as a percent of year 1 income = zero. For relative risk aversion = 1.3, optimal saving is -0.3% of year 1 income. For a reasonable value of relative risk aversion, for instance, $x = 6.0$, optimal savings = -2.341% of year 1 income. For instance, if year 1 income = \$20,000 and there is a 70% chance that income will increase by 12%, the consumer should borrow \$468. The minimum optimal saving (maximum borrowing) is for $x = 8.9$, with optimal borrowing = \$491. For $x=20$, optimal is \$402. For $p = 70\%$, optimal borrowing is approximately constant for values of relative risk aversion between 4 and 20.

For $p = 90\%$, for relative risk aversion = 6.0, optimal savings = -3.712% of year 1 income. If year 1 income = \$20,000 and there is a 90% chance that income will increase by 12%, the consumer should borrow \$742. The minimum optimal saving (maximum borrowing) is for $x = 10.7$, with optimal borrowing = \$790. For $x=20$, optimal borrowing is \$724.

Figure 2 shows the relationship between the optimal ratio of amount saved in year 1 to year 1 income and relative risk aversion, assuming that there is a chance that real income will remain the same in year 2, and a chance that real income will increase by 50% in year 2. A 50% real increase in income might be possible if a family member returns to the labor market. For $p = 100\%$ that real income increases by 50%, optimal borrowing = \$3910 for relative risk aversion (x) = 2, \$4417 for $x=6$, and \$4595 for $x=20$. For $p = 98\%$, optimal borrowing increases from \$764 to \$3946 as x increases from 0.4 to 3.9, then decreases to \$3814 for $x=6$ and \$1746 for $x=20$. For $p = 70\%$, optimal borrowing increases from \$119 to \$1860 as x increases from 0.5 to 2.3, then decreases to \$1412 for $x=6$ and \$498 for $x=20$.

A consumer expecting a high probability of a substantial increase in real income may rationally borrow a large amount of money for current consumption. The importance of a correct assessment of the probability of an income increase may be seen in Figure 2. For any particular level of relative risk aversion, optimal borrowing is

substantially greater for higher probabilities. Note, however, that regret is not assumed to enter the utility function. If a consumer has a relative risk aversion of 6 and a probability of 98% that real income will increase by 50%, then there is a 2% probability that he/she will have the discomfort of repaying the \$3814 borrowing out of an unchanged income of \$20,000. This will result in a drop in real consumption of 21.8%.

Relative Risk Aversion and Optimal Credit Use

Over the range of values of relative risk aversion shown in Figures 1 and 2, there is a substantial difference in optimal credit use. However, based on the two intuitive examples given above, the plausible range of values for relative risk aversion for most consumers is between 4 and 8. Therefore, there is less of a range of optimal credit use for any particular values of the other parameters. For the example in Figure 1, with real income growth = 12%, optimal credit use increases as relative risk aversion increases from 4 to 8. For the example in Figure 2, with real income growth = 50%, optimal credit use decreases as relative risk aversion decreases, for all of the probabilities shown except 100%. There are not large differences, and recommendations based on the midpoint of the range would not be very different from an "optimal" recommendation, assuming a consumer's true value of relative risk aversion was in the range of 4 to 8.

The Credit Use Computer Program

A computer program has been written based on the model described in this paper. The program is available in DOS and Windows versions. The purpose of the program is to give students insight into factors affecting optimal credit use in a two period model. The program asks the user for estimates of the probability that household real income changes next year, as opposed to remaining constant. The user can change the interest rate on loans and the rate of change in income, as well as the level of income this year. The program calculates optimal savings/dissavings for three levels of relative risk aversion: 4, 6 and 8. The program recommends the highest level of savings (lowest level of credit) of the three values of relative risk aversion. As can be seen in Figure 2, there is not a monotonic relationship between relative risk aversion and the optimal amount of credit, so the method used in the computer program is necessary for a conservative recommendation.

Extensions to a Life Cycle Model

The two period model can be extended to a life cycle model if certainty is assumed. For probabilities greater than 98% that real income will increase, there may not be substantial differences in optimal credit use, if it can be assumed that real income will either increase or remain constant after the first year. For many households, the simplifying assumption that income will either increase or remain constant are very unrealistic. However, if there is a small probability that there will be a substantial drop in real income, a consumer who has taken on credit for current consumption has the option of default or some form of bankruptcy. It is difficult to model the costs of bankruptcy, so the possibility is ignored in this paper.

Summary and Conclusion

A two-period model of consumption is developed to analyze optimal credit use decisions, based on the probability that future real income will increase, for different levels of relative risk aversion. With the assumptions that the utility function is additive in C_1 and C_2 , and that there is constant relative risk aversion, effects of parameters on optimal borrowing and saving decisions and the interacting relationships are discussed and demonstrated using numerical simulation technique and graphs. We have shown that the optimal amount of credit use increases with increasing income growth rate and with increasing probability of a real income growth. For many combinations of real growth and probabilities the optimal amount of credit use does not vary by a substantial amount for reasonable values of relative risk aversion (between 4 and 8).

Implications for Empirical Research

Clearly, rational credit use for current consumption depends strongly on the likelihood of an increase in real income. Empirical analysis of credit use should include independent variables related to the probability of a change in real income and the magnitude of possible real income changes. Analysis of consumers who have overused credit, including those who have declared bankruptcy, should take into account the expectations before the credit was obligated. Some research on probabilities of real income changes would be useful.

Implications for Consumer Education

Consumers should be encouraged to realistically evaluate the chances for income increases. If a consumer is "fairly sure" that real household income will increase by 12%, there is a large difference in optimal credit use between a probability of 70% and a probability of 98%. Advice on credit use should depend on individual household characteristics, such as age and occupation, as well as macroeconomic conditions. Young consumers who can realistically expect substantial increases in real income may find credit use for current consumption rational even at high interest rates.

Limitations and Future Research

The simplest possible model of optimal credit use dealing with uncertainty has been developed. Clearly it would be desirable to extend the model to the borrowing and saving decisions over more than two time periods. The more complicated model such as multiperiods or a lifespan analysis of optimal saving and borrowing decisions, however, may require complex computer programming techniques. Further analyses using empirical data may be needed for comparisons between theoretical and empirical results. Advice can then be provided regarding differences between suggested amount of optimal credit use and the consumer's realistic credit practice.

Endnotes

1. Another paper by the authors focuses on the relationship between optimal credit use and the probability of a real increase in income (Fan, Chang and Hanna, 1992, pp. 112-117).

REFERENCES

- Bryant, W. K. (1990). The economic organization of the household. New York: Cambridge University Press.
- Canner, G. B. (1986). "Changes in consumer holding and use of credit cards, 1970-1986," Journal of Retail Banking, 10(1), Spring, 13-24.
- Dreze, J. H. and Modigliani, F. (1972). "Consumption decision under uncertainty," Journal of Economic Theory, 5(3), December, 308-335.
- Eastwood, David B. (1985). "A re-examination of consumer credit growth," in Karen P. Schnittgrund (Ed.) Proceedings of the 31st Annual Conference of American Council on Consumer Interests, Missouri, Columbia: American Council on Consumer Interests, 169-174.
- Fan, X. J., Chang, Y. R. & Hanna, S. (1992). "A two-period model of optimal credit use with uncertain income," in Proceedings of the 1992 Conference of the Southeastern Regional Association of Family Economics/Home Management, Columbus, Ohio, 112-117.
- Fisher, I. (1930). The Theory of Interest, New York: Macmillian Co..
- Grossman, S. J. and Shiller, R. J. (1981). "The determinants of the variability of stock market prices," American Economic Review: Papers and Proceedings, 71(2), May, 222-227.
- Hall, R. (1988). "Intertemporal Substitution in Consumption," Journal of Political Economy, 96(2), 339-357.
- Hanna, S. (1988). Risk aversion and optimal insurance deductibles. American Council on Consumer Interests Proceedings, 141-147.
- Herendeen, J. B. (1975). "The role of credit in the theory of the household," The Journal of Consumer Affairs, 8, 157-181.
- Hey, J. D. (1979). Uncertainty in Microeconomics, New York: New York University Press.
- Hirshleifer, J (1970). Investment, Interest and Capital, Englewood Cliffs: New Jersey, Prentice Hall.
- Hurd, Michael D. (1979). "Mortality risk and bequests," Econometrica, 57(4), 779-813.
- Kimball, M. S. (1988). "Farmers' Cooperatives as Behavior Toward Risk," American Economic Review, 78(1), 224-232.
- Kinsey, J. and Lane, S. (1978). "The effect of debt on perceived household welfare," The Journal of Consumer Affairs, 12(1), summer, 48-62.
- Leland, H. E. (1968). "Saving and uncertainty: the precautionary demand for saving," Quarterly Journal of Economics, LXXXII(3), 465-473.

- Levhari, D. and Srinivasan, T. N. (1969). "Optimal savings under uncertainty," Review of Economic Studies, 36(106), 153-163.
- Mirman, L. (1971). "Uncertainty and optimal consumption decisions," Econometrica, 39(1), 179-185.
- Salyer, K. D. (1988). "The characterization of savings under uncertainty: the case of serially correlated returns," Economic Letters, 26(1), 21-27.
- Sandmo, A. (1970). "The effect of uncertainty on saving decisions," Review of Economic Studies, 37(111), 353-360.
- Sibley, D. S. (1975). "Permanent and transitory income effects in a model of optimal consumption with wage income uncertainty," Journal of Economic Theory, 11(1), August, 68-82.
- Skinner J. (1985). "Variable lifespan and the intertemporal elasticity of consumption," Review of Economics and Statistics, 67, 616-623.

Consumer Choice and the Sunk Cost Effect: A Debiasing Framework

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While normative economics argues that sunk costs should not effect current choices, decision-makers often find sunk costs difficult to ignore. Allowing sunk costs to influence choice is a robust judgmental error which is thought to be difficult to debias. A simple experiment demonstrates that the sunk cost error may be less prevalent when a decision-maker who understands the sunk cost concept: 1) is prompted to adopt an analytical choice strategy; or 2) feels a need to justify his choice of others.

I. Introduction

Normative economics argues that sunk costs are irrelevant to current decisions and should be ignored. Consideration of sunk costs in analyzing a current choice is an irrational economic behavior referred to as the sunk cost effect. Only incremental costs and benefits are relevant to current decisions:

Inherent in the incremental-cost concept is the principle that any cost which is not affected by the decision is an irrelevant cost for purposes of that decision. Costs which are invariant across the alternatives are labeled "sunk costs," as they play no role in determining the optimal course of action (Pappas, 1983, p. 255)

In spite of this normative proscription (hereafter called "the sunk cost principle"), the sunk cost effect is a robust judgmental error observed in a variety of decision contexts - formal and informal, personal and organizational (Thaler, 1980; Laughhunn and Payne, 1984; Arkes and Blumer, 1985).

This paper examines the sunk cost effect in the context of consumer choice. First, I argue that the effect is partly an error of application, not simply an error of understanding (Kahneman and Tversky, 1982). Even subjects who understand and endorse the sunk cost principle often fail to ignore sunk costs when making choices. Second, this error of application is most likely to occur when one or both of the following conditions apply:

- (1) the decision maker is employing an heuristic, non-analytical choice strategy.
- (2) the decision maker is motivated by a desire to appear retrospectively rational rather than to be prospectively rational.

Finally, I hypothesize that the sunk cost effect can be substantially reduced if the task environment and task structure encourage an analytical, prospective choice strategy.

The remainder of this paper is organized into four sections. Section I reviews mechanisms by which sunk costs may influence choice and demonstrates that each of these mechanisms requires that the decision maker is either employing an heuristic choice strategy or is driven by a desire to appear retrospectively rational. Section II draws on theory from social psychology to suggest possible techniques for overriding or debiasing the sunk cost effect. Seven hypotheses are proposed. Section III presents a simple experiment which tests two proposed debiasing techniques. Finally, implications for further debiasing efforts and for further research are discussed.

¹The experimental design was developed with the assistance of Itamar Simonson, University of California, Berkeley.

II. Theory: How Sunk Costs Influence Choice

Previous research suggests that the sunk cost effect may be more an error of application than an error of understanding. For example, Arkes and Blumer (1985) conducted an experiment with three groups of subjects, differing in their formal training in economics (no training; one course; a major in economics). They conclude that "instruction in economics does not lessen the sunk cost effect." While specific instruction regarding the sunk cost principle may be useful, this paper argues that instruction alone is insufficient to override the sunk cost effect.

HYPOTHESIS A: The sunk cost effect is partly an error of application. The effect will be prevalent even among subjects who endorse the sunk cost principle.

There are two explanations for this hypothesis. First, the sunk cost principle is a normative rule which is logically compelling, but not intuitive. Decision makers (DM's) who understand the principle will usually apply it when they employ a conscious, analytical choice strategy, but will often fail to apply it when they employ an intuitive, heuristic strategy. In short, the sunk cost principle is a logical precept which will often not be invoked when DM's are behaving intuitively- as is frequently the case with consumer choice. Second, to comply with the sunk cost principle, DM's must not only employ a conscious, analytical choice strategy, they must also be motivated to make a prospectively rational choice. Consumers and other decision makers are often motivated by a desire to justify previous choices rather than to make current choices which are rational (Simonson, 1987 1989; Staw, 1976 1980). In such circumstances, DM's may employ conscious analytical strategies which are "retrospectively rational" rather than "prospectively rational" (Staw, 1980).

If the sunk cost effect is an error of application, the critical question becomes: when and why are DM's who understand the sunk cost principle influenced by sunk costs? This section reviews mechanisms by which sunk costs are thought to influence choice.

Prospect Theory: the Psychophysics of Value

Prospect theory suggests one explanation as to how a sunk cost can influence a current choice. Prospect theory identifies two stages of the choice process: 1) editing or framing options, and 2) evaluation and choice (Kahneman and Tversky, 1979). The theory argues that framing will influence evaluation and choice. I will briefly describe each stage as it applies to the sunk cost problem.

Using the terminology of mental accounting, a sunk cost problem may be framed using either the "minimal account" or the "psychological account." The consumer frames a choice using the "minimal account" when he ignores sunk costs and considers only prospective gains and losses which would result from the decision. Alternatively, the consumer can frame the choice using the "psychological account," in which case sunk costs are incorporated in the analysis, and prospective gains and losses are evaluated with reference to an initial asset position reflecting earlier decisions. Tversky and Kahneman argue that people normally adopt the minimal account to simplify evaluation, but they acknowledge that the sunk cost effect is a frequently observed exception to the rule: "A sunk cost effect arises when a decision is referred to an existing account in which the current balance is negative" (1981, p. 457).

Framing may be a critical determinant of the choice made in the second stage of the decision process. To understand the dynamics by which the decision frame influences choice, it is necessary to understand the value function, a critical construct in prospect theory. The value function specifies the relationship between objective gains and losses (usually measured in dollars) and the psychic value which the decision maker attaches to those gains and losses. Figure I-A depicts a hypothetical value function, with gains and losses measured horizontally and their psychic values measured vertically. The value function is: 1) "defined over gains and losses with respect to some natural reference point"; 2) "concave for gains and convex for losses"; and 3) "steeper for losses than for gains" (Thaler, 1980, 42-43).

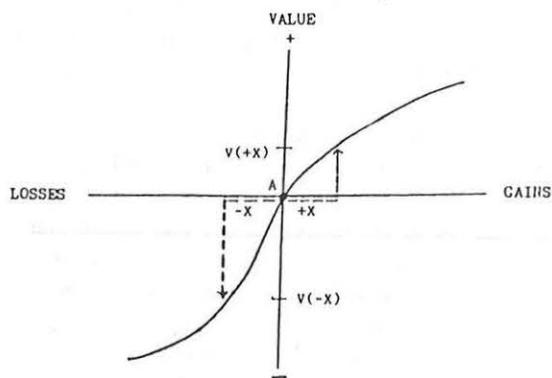
The value function explains how consideration of a sunk cost will impact a current choice. Consider the following risky choice which is represented in

Figure II.

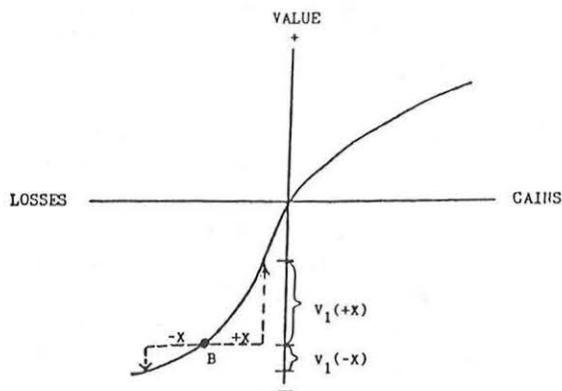
Problem 1 (used automobile)

You want to dispose of your old automobile at a reasonable price. Your local auto dealer has offered you \$200 only if you will sell today. Alternatively, you can try to sell the car on your own. You believe that there's a 50 percent chance you could sell it for \$400 and a 50 percent chance that it will break down and have to be scrapped at a cost of \$50. Only 3 months ago you spent \$300 to keep the car on the road. Will you sell now or hold out for a better deal?

Figure I
The Value Function



(A) framing with the minimal account

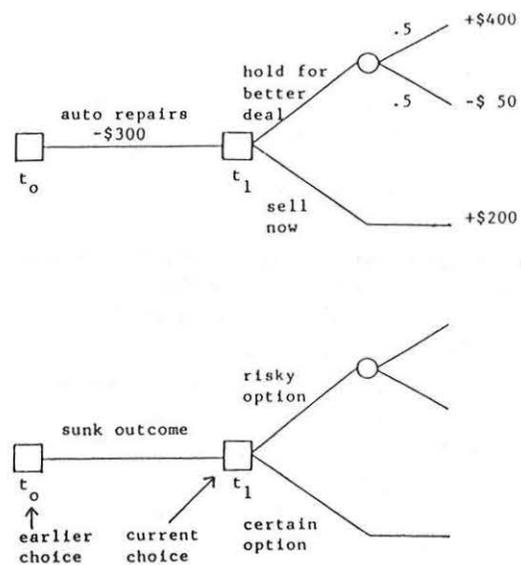


(B) framing with the psychological account

The base gamble is a choice between a certain gain of \$200 and a risky option which promises an equal chance of gaining \$400 or losing \$50. The previous

auto repairs are normatively irrelevant since they represent a sunk cost. If the minimal account is adopted, the consumer is likely to choose the certain option (sell now): it is risk-free and offers a higher expected return than the risky alternative. Using the minimal account, the possible outcomes from the risky option will be evaluated relative to a zero reference point (point A in Figure I-A). The value function will accentuate the aversiveness of the loss (-\$50) and reduce the attractiveness of the gain (+\$400), thus reinforcing the preference for the certain outcome.

Figure II
Asset Disposal Problem



However, if the psychological account is adopted, the risky option will appear relatively more attractive. The possible outcomes will be evaluated relative to a reference point of -\$300 (point B in Figure I-B), the existing deficit in the psychological account. In this case, the value function will accentuate the attractiveness of the potential gain and will reduce the aversiveness of the potential loss, thus making the risky option more enticing. An additional loss of \$50 on top of an existing deficit of \$300 is not as aversive as a loss of \$50 which is mentally accounted for in isolation. The implication is clear: in a sunk cost problem, adoption of the psychological account will encourage increased risk seeking.

Although prospect theory is concerned with risky decisions, the value function explains how adoption of the psychological account will affect deterministic choices as well. In general, a certain gain will seem more attractive when it is evaluated relative to an existing sunk cost rather than in isolation; and a certain loss will seem less aversive when lumped with an existing sunk cost. Consider an example:

Problem 2 (tennis club)

You own an annual membership in the local indoor tennis club. In retrospect, you feel that the annual membership fee of \$400 is too steep, and you do not plan to renew at the end of the year. Court fees are \$10 per hour. How many times per month will you use the courts?

The \$400 membership fee is a sunk cost and is normatively irrelevant to the decision. However, some consumers will be unable to ignore it. The \$10 usage fee will seem less aversive when it is evaluated relative to a reference point of -\$400 (psychological account) than when it is evaluated relative to a zero reference point (minimal account). Hence, consumers adopting the psychological account will be inclined to use the courts more frequently than those who ignore the sunk cost. This observation led Thaler (1980, p. 49) to identify a common application of the sunk cost effect: "Paying for the right to use a good or service will increase the rate at which the good will be utilized, *ceteris paribus*."

The preceding explanation of the sunk cost effect implicitly assumes that the DM is using an heuristic, non-analytical decision strategy. In order for a sunk cost to influence choice, two mechanisms must operate. First, at least one option must be framed using the psychological account. Second, the value function must be invoked to evaluate the options. Both of these mechanisms operate largely beyond conscious recognition. DM's tend to adopt decision frames in an heuristic manner and are often unaware of how they have framed a choice. A superficial feature of the problem may cue adoption of a decision frame. Similarly, the value function is a psychophysical mechanism which operates outside the realm of systematic analysis.

Kahneman and Tversky (1982) support this interpretation. They define an intuitive judgment as one which "is reached by an informal and unstructured mode of reasoning, without the use of analytical methods, ..." (1982, 124). They argue that most judgmental errors result from the use of heuristic or intuitive decision strategies. Even sophisticated decision makers will make judgmental errors when employing intuitive strategies, because their expertise cannot be brought to bear on the choice. Thus, a DM is most likely to suffer from the sunk cost effect if he is using an intuitive decision strategy involving little deliberate analysis.

Justification and Retrospective Rationality

The justification literature (Aronson, 1973; Staw, 1980; Cialdini, 1985; Tetlock, 1985) complements prospect theory in explaining the sunk cost effect. While prospect theory focuses on the consequences of considering sunk costs, the justification literature focuses on the motivation for doing so. According to the escalation of commitment research, DM's adopt the psychological account in order to avoid the damage to self-esteem and social image that accompanies acknowledgment of having made a bad decision. Psychologically "writing off" a sunk cost and ignoring it in subsequent decision-making requires the admission that a previous decision to expend resources was a mistake. Such an admission is aversive and can be avoided (or delayed) by continuing efforts to "recover" the sunk cost. Man is a "rationalizing animal" who will make great efforts to justify past decisions (Aronson 1973). Staw (1980) summarizes this explanation of the sunk cost effect:

Probably the most critical element separating prospective from retrospective rationality is the individual's treatment of sunk costs. ... The individual, in order to appear rational in his decision making, is likely to keep sunk costs as an active part of decision making under retrospective rationality. The desire to recoup sunk costs is probably what underlies much of the behavior that we commonly label as self-justification. ... By throwing good money after bad individuals sometimes attempt to prove that they never really made a mistake after all. (57-58)

While earlier literature on self-justification and

dissonance (Aronson, 1968; Festinger, 1957) focuses on internal self-justification, Staw argues that in organizational contexts the desire for external justification may be more important. Simonson (1987a, 1987b) demonstrates that the desire for external justification is a salient motive in consumer choice. Tetlock (1985) argues that the individual DM is strongly motivated to protect both his self-image and his social image.

All of the justification-based explanations of the sunk cost effect require that the DM act in an "irrational" manner in that his choice is driven by retrospective concerns rather than by prospective outcomes. In addition, Staw argues that behavior motivated by justification often has an heuristic character. DM's may "simply accept culturally prescribed actions without undergoing any active decision making" (1980, 49). For example, DM's may almost automatically follow a consistency principle or avoid "wastefulness" without systematically analyzing the choice options.

Summary

Prospect theory and the justification literature offer complementary explanations of the sunk cost effect. Both explanations require that the DM employ choice strategies which are retrospective, heuristic or both. It follows that it may be possible to diminish the sunk cost effect by structuring the decision task and the decision environment to encourage systematic, prospective analysis of choice options. The following section suggests several possible debiasing techniques consistent with this logic.

III. Theory: Debiasing the Sunk Cost Effect

Most judgmental errors are robust and not easily overcome by simple manipulations - such as inducing DM's to work harder. According to Fischhoff (1982, 440), "Effective debiasing usually has involved changing the psychological nature of the task (and subjects' approach to it). "Below, I propose two techniques for debiasing the sunk cost effect. Both attempt to alter the subjects' approach to the choice task by encouraging systematic, prospective analysis.

The Reasoning Prompt

Hagafors and Brehmer (1983) describe a continuum of thinking modes, ranging from intuitive thought to analytical thought. Similarly, Chaiken (1980), in studying persuasion, identifies a continuum between heuristic processing and systematic processing. DM's using an intuitive, heuristic mode apply simple, non-analytical decision rules, exert relatively little cognitive effort, and are often not conscious of the decision strategies they are using. Because any number of peripheral contextual factors may cue the adoption of a choice heuristic, choices made by the intuitive DM are very sensitive to superficial changes in context and are often inconsistent. A DM is consistent if he responds similarly to problems with the same deep structure. The intuitive DM is inconsistent in his choices because he responds to superficial surface features of the problem rather than to the deep structure. In contrast, the analytical DM applies a systematic decision strategy, exerts greater cognitive effort and is usually conscious of his decision strategy. As a result, the analytical DM makes more consistent and more normatively rational choices.

The previous section argued that the sunk cost effect will be most prevalent when DM's adopt an intuitive choice strategy. The reasoning prompt is a manipulation in task structure which is expected to reduce the sunk cost effect by encouraging DM's to move away from intuitive choice strategies towards more systematic strategies. The manipulation is simple: subjects are instructed to briefly list reasons for choosing each alternative before making a final choice. Two effects are hypothesized.

HYPOTHESIS B1: The sunk cost effect will be less prevalent among DM's in the reasoning condition than among DM's in a control condition.

HYPOTHESIS B3: DM's in the reasoning condition will make more consistent choices than DM's in a control condition.

Accountability Prompt

Tetlock (1983, 1985) argues that individual choice behavior cannot be understood independent of its social context; choice strategies are influenced by social motives as well as by cognitive factors. Tetlock has studied the impact of accountability

("the need to justify one's views to others", 1983, 74) on the complexity of the decision maker's thinking. DM's are often very concerned about being able to justify their choices. Although DM's prefer to be "cognitive misers," relying on simple choice heuristics, they will adopt more thoughtful, systematic choice strategies when they expect to be held accountable for their choices. In Tetlock's research, DM's who expected to be held accountable engaged in "preemptive self-criticism:"

They attempted to anticipate counterarguments and objections that potential critics could raise to their positions. This cognitive reaction could be viewed as an adaptive strategy for maintaining both one's self-esteem and one's social image." (1983, 81)

Due to preemptive self-criticism, DM's who are concerned about justifying their choices should exert more cognitive effort, employ more systematic choice strategies, be more aware of the strategies they are using, and make more consistent choices. Accountable DM's will engage in more complex thinking: they will be more circumspect, considering arguments on both sides of an issue (Tetlock, 1985).

Although Tetlock's work focuses on opinion formation, he speculates that accountability might reduce certain judgmental errors as well. Accordingly, I predict that DM's expecting to be held accountable for their choices will be less susceptible to the sunk cost effect than DM's not held accountable. In the accountability condition, DM's are told that they will be held accountable for the current choice. Specifically, the DM is informed *before making the choice* that he may later be asked to justify his choice to important others. Three effects are hypothesized:

HYPOTHESIS C1: The sunk cost effect will be less prevalent among DM's in the accountability condition than among DM's in a control condition.

HYPOTHESIS C2: DM's in the accountability condition will exert more cognitive effort (as measured by time devoted to the task) in

making a choice than will DM's in a control condition.

HYPOTHESIS C3: DM's in the accountability condition will make more consistent choices than DM's in a control condition.

IV. Exploratory Study: Design

This study tests six hypotheses presented in the previous sections.

Subjects

104 undergraduates from Duke and the University of North Carolina completed questionnaires as an exercise in their marketing classes. One objective of this study is to demonstrate that the sunk cost effect is in large part an error of application, committed even by DM's who understand the sunk cost principle. For this reason, the current analysis focuses only on the 84 respondent's who endorsed the sunk cost principle. Subjects were asked to agree or disagree with a statement of the sunk cost principle using a six point scale (1 = strongly disagree, 6 = strongly agree). Subjects scoring below 3.5 were eliminated from this analysis; the remaining 84 subjects averaged 5.14 on the scale.

Questionnaire

Eight sunk cost problems were embedded in an 18 item questionnaire. Each problem described a recently incurred sunk cost and then asked the subject to choose between two courses of action. Three problems described risky choices while five described deterministic choices (certain outcomes). Representative problems are included in the Appendix. In each problem a strong normative case can be made for choosing one course of action, but a psychologically salient sunk cost might induce DM's to choose the alternative course. Consider, for example, the used automobile problem described in Exhibit II and the Appendix. Selling the auto now is the normatively prescribed action, because it offers less risk (none) and a higher expected payoff than the risky alternative of holding out. On a risk/return basis, "selling now" dominates "holding out." However, subjects who are unable to ignore the \$300 sunk in auto repairs may be inclined to hold out.

Experimental Design

A one-way design with three conditions was employed. The manipulations were achieved by varying the instructions attached to the questionnaire.

CONTROL CONDITION: Your responses are collected solely for statistical purposes and will only be analyzed together with the responses of other participants in this study. Do not put your name on the questionnaire.

REASONING CONDITION: For these problems, your task has two parts. First, briefly list advantages of (or reasons for) selecting each alternative. Second, indicate the choice you would make in that situation. (repeat control instructions)

ACCOUNTABILITY CONDITION: In a few weeks you may be invited to meet with the researchers conducting this study to explain and justify your choices.

Please print your name and social security number on the next page. In addition, in order to ensure that pages do not get lost, please enter your initials in the upper right-hand corner of each page.

In the reasoning condition subjects were provided with a table in which to list reasons for choosing each alternative. This manipulation explicitly encouraged subjects to adopt a systematic decision strategy.

Dependent Measures

Each subject chose between the normatively recommended option and the alternative on each of eight questions. The average number of normatively incorrect choices was calculated for each condition. This is an indicator of the strength of the sunk cost effect and was the variable of primary interest. In addition, for each of the eight problems, the proportion of subjects in each condition choosing the normatively inferior alternative is reported.

Subjects in the accountability and reasoning conditions are expected to exert greater cognitive effort and make more consistent choices than

control subjects. The amount of time devoted to the questionnaire is used as a proxy for cognitive effort. Since subjects in the reasoning condition do an additional task (listing of arguments) which control subjects do not do, the time variable confounds cognitive effort with task requirements. As a result, it is not possible to demonstrate that more cognitive effort is exerted in the reasoning condition than in the control condition.

Consistency of choice is measured twice: once for all 8 choices and once for just the 3 risky choices, which are more complex. A consistency index takes on a value of 0 when choices are completely inconsistent and a value of 1 when choices are completely consistent.

Error of Application

All of the subjects in this analysis endorsed the sunk cost principle. On a six-point scale, where 6 represents strong endorsement, the average subject scored 5.14. Despite this apparent understanding of the sunk cost principle, in all eight problems a significant proportion of subjects ($p < .001$) chose the normatively inferior option. In fact, in half of the problems more than 50 percent of subjects chose the inferior option. These results support hypothesis A.

Endorsement of the sunk cost principle is equally strong across treatments (Table I). Therefore, in the following analysis any differences in the experimental groups cannot be explained by differences in understanding.

Reasoning Effect

Cognitive Effort and Consistency. As expected, subjects devoted more time to the task under the reasoning condition than under the control condition (24.2 vs 11.8 minutes, $F=194$, $p < .001$). However, it is not clear to what extent the increased time reflects cognitive effort and to what extent it reflects the added chore of writing down arguments. While the writing task is time consuming, the argument listings did not appear sufficiently lengthy to account for a doubling of time. While I believe that the time differential partly reflects increased cognitive effort, hypothesis B2 is not clearly supported.

V. Exploratory Study: Results

Table I

	ACCOUNT-		
	CONTROL n = 33	ABILITY n = 24	REASONING n = 27
manipulation check for ACCOUNTABILITY: 1 = very low expect- ation of being held accountable 10 = very high	2.69	4.21***	3.85**
endorsement of SUNK COST PRINCIPLE: 1 = strongly disagree 6 = strongly agree	5.09	5.08	5.26
<u>Dependent Variables</u>			
INCORRECT CHOICES (# of normatively incorrect choices, 1 to 8)	4.15	3.04***	2.67****
TIME devoted to task (minutes)	11.83	13.88**	24.19
CONSISTENCY (3 risky choices): 0 = inconsistent 1 = consistent	.394	.444	.580***
CONSISTENCY (across all 8 choices)	.326	.323	.463**
Significantly different from control group at			
* p <= .10 *** p <= .01			
** p <= .05 **** p <= .001			

As expected, reasoning subjects responded more consistently across the set of eight problems than control subjects did (.463 vs .326, $F=4.45$, $p < .05$). The consistency differential was even greater across the three risky choices (.580 v .394, $F=7.60$, $p < .01$). Since the risky choices were more realistic, more complex and less transparent than the deterministic choices, the reasoning manipulation may have provided a particularly strong advantage here. Hypothesis B3 is supported.

Sunk Cost Error. The reasoning prompt did reduce the incidence of the sunk cost error (Table I). The mean number of normatively incorrect choices was lower for subjects in the reasoning

condition than for subjects in the control condition (2.67 vs 4.15, $F=13.31$, $p=.0005$). In addition, Table II presents the proportion of subjects responding incorrectly to each of the 8 problems. The table reports one-tailed tests on differences in proportions. The reasoning prompt significantly reduced the sunk cost error in some, but not all, problems. In 7 of the 8 problems a smaller proportion of reasoning subjects than control subjects chose the normatively inferior option. The difference was significant in 4 problems and marginally significant in one (law suit, $p = .15$). Considering only the three risky choice problems, the sunk cost effect was very significantly reduced ($p < .001$) in two cases and marginally reduced in the third. Collectively these results support hypothesis B1. The sunk cost effect is less prevalent in the reasoning condition.

Table II

	ACCOUNT-		
	CONTROL n = 33	ABILITY n = 24	REASONING n = 27
<u>Percent of Subjects Choosing</u>			
<u>Risky Choice Problems</u>			
law suit	42.4	41.7	29.6
used automobile	57.6	45.8	14.8 ****
well drilling	63.6	45.8*	25.9 ****
<u>Deterministic Choices</u>			
theater ticket	54.6	25.0***	48.1
land purchase	36.4	20.8*	29.6
basketball game	72.7	66.7	40.7***
health care	48.4	37.5	29.6*
theater subscription	39.4	20.8*	48.2
Significantly different from the control group at			
* p <= .10 *** p <= .01			
** p <= .05 **** p <= .001			

Accountability Effect

Manipulation Check. To verify the effectiveness of this manipulation, subjects responded to the following statement on a 10-point scale anchored by "very low"(1) and "very high"(10): "The likelihood that I will be asked to justify the choice decisions that I made on this questionnaire is ____." This scale was significantly higher in the accountability condition than in the control condition ($F=6.8$, $p = .01$). However, even for the accountability condition, the mean on this scale was low (4.21 out of 10). A debriefing of subjects confirmed that the manipulation was weak. Most

subjects did not believe that they would be held accountable. The instructions said only that subjects "may" be asked to justify their choices. In addition, the researcher was an outsider from another school or university.

Cognitive Effort and Consistency. Accountable subjects devoted slightly more time to the task than control subjects did (13.9 vs 11.8 minutes, $F=4.96$, $p < .05$). However, their choices were not significantly more consistent. Hypothesis C2 (cognitive effort) is weakly supported. Hypothesis C3 (consistency) is not supported in this case. Both results are disappointing, as theory would suggest substantial differences. However, these results are consistent with the weak manipulation.

Sunk Cost Error. In spite of the weak manipulation, accountability appears to have reduced the sunk cost error. The mean number of incorrect choices (Table I) was lower in the accountability condition than in the control condition (3.04 vs 4.15, $F=6.96$, $p=.01$). In all eight problems a smaller proportion of accountable subjects than control subjects chose the inferior option (Table II). The difference was significant in 4 problems ($p \leq .10$). Hypothesis C1 is supported, although the results are not strong.

VI. Implications and Discussion

Although the manipulations in this experiment were simple and not dramatic, they had a significant debiasing impact. This suggests possibilities for other debiasing techniques. For example, the reasoning prompt urges subjects to briefly but systematically evaluate the options before making a choice. It provides little further structure to the choice process. A manipulation which provides greater structure might have a more dramatic impact. Consider a technique which effects both social context and task structure - dyadic choice. The theory developed in this paper suggests that dyadic choice may be less prone to judgmental error than individual choice. A dyadic task may encourage a systematic choice (strategy simply because communication favors an organized, explainable thought process. If this is true, perhaps many important consumer choices are better made collectively rather than individually.

While this paper focuses on one common judgmental error, other violations of normative economic principles are commonly observed. For example, DM's often ignore or underweight opportunity costs, fail to make choices at the margin (marginal cost = marginal benefit), and fail to treat money as a fungible commodity (Thaler, 1986). In all of these cases the normative principle is logically compelling but not intuitive. Techniques designed to encourage more systematic decision strategies might be effective in diminishing these errors as well.

Appendix Sample Questions

Used Automobile (Risky Choice Problem)

You want to buy a new car as soon as you can dispose of your current vehicle at a reasonable price. Your local auto dealer has offered you \$200 if you will sell today. Alternatively, you can try to sell the car on your own. You believe that there is a 50 percent chance you can sell it for \$400 and a 50 percent chance that it will break down on you and have to be scrapped at a cost of \$50. Only one month ago you spent \$300 to keep the car on the road.

Will you sell or hold out for a better deal?

SELL HOLD

Land Purchase (Deterministic Choice Problem)

You are interested in purchasing land on which to build a home. You have already paid \$5000 for the option to buy property A for \$100,000. The \$5000 is not applicable to the downpayment. As you continue your search, you discover another equally attractive site (property B) available for \$98,000.

Which site will you purchase?

PROPERTY A PROPERTY B

References

- Arkes, H.R., & Blumer, C. (1985). The Psychology of Sunk Cost. Organizational Behavior and Human Performance, 35, 124-140.
- Aronson, E. (1968). Dissonance Theory: Progress and Problems. Theories of Cognitive Consistency: A Sourcebook, ed. by Abelson, et. al. Chicago, IL: Rand McNally.
- Aronson, E. (1973). The Rationalizing Animal. Psychology Today Magazine.
- Chaiken, S. (1980). Heuristic vs. Systematic Information Processing and the Use of Source vs. Message Cues in Persuasion. Journal of Personality and Social Psychology, 39, 752-766.
- Cialdini, R. (1985). Influence: Science and Practice. Glenview, IL: Scott Foresman and Company.
- Festinger, L. (1957). A Theory of Cognitive Dissonance. Stanford, CA: Stanford University Press.
- Fischhoff, B. (1982). Debiasing. Judgment Under Uncertainty: Heuristics and Biases, ed. by D. Kahneman, P. Slovic & A. Tversky. New York: Cambridge University Press, 422-444.
- Hagafors, R. & Brehmer, B. (1983). Does Having to Justify One's Judgments Change the Nature of the Judgment Process? Organizational Behavior and Human Performance, 31, 223-232.
- Kahneman, D. & Tversky, A. (1982). On the Study of Statistical Intuitions. Cognition, 11, 123-141.
- Kahneman, D. & Tversky, A. (1979). Prospect Theory: An Analysis of Decision Under Risk. Econometrica, 47 (March), 263-291.
- Laughunn, D. & Payne, J.W. (1984). The Impact of Sunk Outcomes on Risky Choice Behaviour," INFOR, 22(2), 155-181.
- Pappas, J., et. al. (1983). Managerial Economics, fourth edition. New York: Dryden Press, 254-256.
- Simonson, I. (1987). Justification Processes in Choice. Duke University, unpublished doctoral dissertation.
- Simonson, I. (1989). Choice Based on Reasons: The Case of the Attraction and Compromise Effects. Journal of Consumer Research, 16 (September), 158-174.
- Staw, B.M. (1976). Knee-Deep in the Big Muddy: A Study of Escalating Commitment to a Chosen Course of Action. Organizational Behavior and Human Performance, 16(1), 27-44.
- Staw, B.M. (1980). Rationality and Justification in Organizational Life. Research in Organizational Behavior, 2, 45-80.
- Teger, A.I. (1980). Too Much Invested to Quit. New York: Pergamon Press.
- Tetlock, P. (1983). Accountability and Complexity of Thought. Journal of Personality and Social Psychology, 45, 74-83.
- Tetlock, P.E. (1985). Accountability: the Neglected Social Context of Judgment and Choice. Research in Organizational Behavior, 7, 297-332.
- Thaler, R. (1985). Mental Accounting and Consumer Choice. Marketing Science, 4(3), 199-214.
- Thaler, R. (1986). The Psychology of Choice and the Assumptions of Economics. Laboratory Experiments in Economics: Six Points of View, ed. by A Roth. Cambridge, England: Cambridge University Press.
- Thaler, R. (1980). Toward a Positive Theory of Consumer Choice. Journal of Economic Behavior and Organization, 1, 39-60.
- Tversky, A. & Kahneman, D. (1981). The Framing of Decisions and the Psychology of

Consumer Satisfaction with Auto Insurance: The Differences Between Tort and No-Fault

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Consumers seem more dissatisfied with auto insurance than ever before. One method of addressing the growing consumer dissatisfaction is by adoption of no-fault laws. This study examines consumer satisfaction with various aspects of auto insurance in a tort-liability state (Indiana) and a no-fault state (Michigan). Results show that the principle difference between the states is differing levels of satisfaction with the premium price of the insurance. Satisfaction with other factors did not differ between the states. Comparisons of satisfaction based on selected other independent factors were also conducted.

Introduction

There is mounting evidence that consumers are dissatisfied with auto insurance. In recent years California (Bowman, 1989), New Jersey (Dauer, 1991), Massachusetts (Stimpson, 1989), Arizona (Wojcik, 1990), Pennsylvania (Calise, 1991), Michigan (Mulcany, 1990) and Georgia (Knowles, 1990) have either adopted or considered measures to reduce auto insurance premiums.

Public opinion polls bear out this consumer dissatisfaction with auto insurance. A survey commissioned by the Insurance Information Institute indicated that nine out of ten registered voters in the United States would support an initiative similar to California's 20% rate roll back (Knowles, 1989). A

national public opinion survey conducted for the Consumer Federation of America, the Consumers Union, and the National Insurance Consumers Organization found that 72% of those surveyed believed auto insurance rates are too high (Brostoff, 1989).

Auto insurance industry advocates contend that increased litigation, legal expenses, medical costs, and settlements all contributed more to the increase in auto insurance costs than increased industry profits. The advocates also say that while today's cars are more expensive than ever, they are not significantly safer than those of the past (Kittel, 1990; Mulcahy, 1989).

Some believe that the roots of consumer dissatisfaction lie in the traditional tort liability insurance plan where auto insurance protects the buyer against their own negligence in case of accident. According to insurance industry executive Les Maine, "... they (consumers) understand they're forced to pay for it (auto insurance), and many realize that settlement amounts are soaring, but what value is it to them? Most people don't want to believe they're going to be involved in a large claims situation. Even if the situation should occur, their insurance policy will probably pay someone else, not them!" (quoted in Maher, 1989 p. 19).

This study examines the overall satisfaction of consumers with auto insurance based upon the type of

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auto insurance their state has, tort or no-fault. The study also looks at consumer satisfaction with various characteristics of auto insurance.

Literature

The literature concerning no-fault insurance primarily consists of discussions of the elements of the plan (Witt & Urrutia, 1984a; Wenck, 1980; Todd, 1976), and empirical evidence of the benefits and costs associated with no-fault insurance.

Among the empirical results, Witt and Urrutia (1984b) found that incremental benefits were gained by consumers under the no-fault plan, as well as greater compensation to accident victims, compared to those covered by a tort-liability system. Reductions in premium price for consumers of no-fault versus tort-liability insurance were found by Meier and LaFollette (1987). In addition, contrary to the expectations of moral hazard theory, no-fault insurance did not lead to an increase in traffic fatalities (Kochanowski & Young, 1985; Zador & Lund, 1986). In a United States Department of Transportation report (1985), it was concluded that compared to states with tort insurance, residents in no-fault states were more likely to be compensated as an accident victim, receive higher compensation payments on average, and receive them more quickly.

Not all research results find no-fault as superior in all respects. In the United States Department of Transportation report (1985), it was found that average premiums in no-fault states were higher than in tort states. Higher premiums in no-fault states were also reported by Johnson, Flanagan, and Weeks (1983). These findings contrast to the Meier and LaFollette (1987) study. The Department of Transportation report also noted that no-fault insurance did not increase the number of traffic accidents in those no-fault states, however a study by Landes (1982) found that no-fault did nothing to reduce the number of accidents either.

There is still public support for the concept of no-fault insurance. A recent study by the Insurance Research Council (1990) concluded that a majority of consumers would prefer a system where compensation comes from a person's own insurance company rather than from the other another's

company.

Methods

This project used methods similar to those used in the Texarkana credit studies (Lynch & Blades, 1974). Two counties, one in Michigan and another in Indiana, were selected for their demographic similarities and close proximity. This research method has the advantage of compensating at least partially for factors such as imperfect information, urbanization, and demographic variability across a large area such as a state. The method does reduce the ability to generalize to all consumers of in the two states.

A questionnaire was mailed to 600 residents in Branch county, Michigan (a no-fault state) and 600 in adjacent Steuben county, Indiana (a tort liability state). The sample was randomly selected from telephone books. The questionnaire was directed to the household member most knowledgeable about car insurance. Approximately 250 of the questionnaires were undeliverable, leaving a effective return rate of just under 30% or 268 completed questionnaires. Nearly 70% of the sample consisted of males. The respondents tended to be well educated (65% reported some post secondary education), and 45% of the sample had an average personal income of over \$25,000 annually. The frequency of responses for selected questions are given in Table 1.

Comparisons of the respondents' characteristics with census data for the region indicates that the sample is more likely to be male, is likely to be better educated, and is more likely to have a higher income than others in the population of the two counties used in the analysis. Since the questionnaire was directed to the most knowledgeable household member, the increased number of males in the sample is not a particular problem. The higher than average income, however, suggests that low income households are probably under represented in the sample. Formisano, Olshavsky, and Tapp (1982) found that low income and poorly trained consumers were less likely to have studied information on insurance before purchasing and this might explain the lower response rates.

Table 1
Frequencies and Means of Selected Questions

Characteristic	Frequencies
Claims filed with car insurance company during the past 5 years.	45% None 44% 1 to 2 10% 3 to 5 2% Over 5
Total costs of annual car insurance premiums.	1% Less than 200 13% 201 to 400 21% 401 to 600 22% 601 to 800 14% 801 to 1,000 9% 1,001 to 1,200 19% Over 1,201
Before tax personal income.	4% Under 5,000 8% 5,001 - 10,000 13% 10,001 - 15,000 17% 15,001 - 20,000 12% 20,001 - 25,000 20% 25,001 - 35,000 14% 35,001 - 50,000 6% 50,001 - 75,000 5% Over 75,001
Gender.	70% Male 30% Female

Results

Those surveyed were given a list of characteristics of auto insurance and asked to rank them from most important to least important. Respondents were also given a similar set of characteristics and asked to rate their satisfaction with their current insurance based on these factors. Satisfaction was measured by a four point scale ranging from very satisfied to very dissatisfied.

When asked to rank the important characteristics of auto insurance, consumers in the Michigan, the no-fault state, and Indiana, the tort liability state, had no significant differences in the way factors were ranked. Low premiums ranked highest in both states, and the right to sue others was ranked lowest in both. All other factor were ranked in essentially the same order respondents in both of the states as well.

When the responses concerning satisfaction with different characteristics of auto insurance are compared, only one significant difference was identified. Those in Michigan, the no-fault state,

were significantly less satisfied with the premiums of their auto insurance than were those in Indiana. Other factors, such as the speed of claims resolution, protection against uninsured drivers, opportunity to sue others, service of company representatives, and fair settlement had no significant differences based upon the state of residence. Also, in terms of the overall satisfaction of consumers with the type of insurance their state offers, there were no significant differences between the two groups. Findings based upon state and type of insurance are summarized in Table 2.

Table 2
Satisfaction with Insurance Characteristics:
Mean Responses and Analysis of Variance Results Based on Type of Insurance¹

Characteristic	Indiana	Michigan	F
	(Tort)	(No-fault)	
Speed of claims resolution:	1.806	1.690	1.744
Premium:	2.596	2.969	16.184***
Protection against uninsured drivers:	2.062	2.216	2.823*
Total coverage protection:	2.065	2.101	.203
Opportunity to sue:	2.119	2.176	.502
Service and friendliness of company personnel:	1.673	1.598	.791
Equitable/fair settlement compensation:	1.990	1.955	.166
Overall satisfaction with your type of auto insurance:	2.008	2.210	2.474

* p < .10; ** p < .05; *** p < .01
¹ Mean scores based on four point scale.

Comparisons were made between groups of consumers based upon factors other than the type of auto insurance. Findings, based upon median splits for different factors, indicate that those with three or more claims in the past five years were significantly

more satisfied with the speed of claims resolution than those who had not filed a claim in the past five years. Those with lower premiums, \$600 dollars or less, were significantly more satisfied with the premiums they paid than were those with higher premiums, \$801 or more. Those with lower premiums were significantly less satisfied with the level of coverage their insurance provided. In terms of overall satisfaction, neither the number of claims, premiums, nor income had a significant effect. Findings related to these other factors are summarized in Table 3.

Table 3
Satisfaction with Insurance Characteristics:
Mean Responses and Analysis of Variance Results Based on Selected Variables^{1 2}

Characteristic	Claims History		Premium	
	Low	High	Low	High
Speed:	1.961 (18.608)***	1.429	1.803 (2.826)*	1.633
Premium:	2.731 (.011)	2.714	2.513 (19.722)***	3.000
Protection from uninsured:	2.180 (.205)	2.111	2.179 (.694)	2.089
Total Coverage:	2.130 (1.117)	2.000	2.182 (3.950)**	1.989
Opportunity to Sue:	2.135 (.097)	2.174	2.129 (.619)	2.200
Service:	1.777 (2.807)*	1.552	1.634 (.000)	1.627
Fair Settlement:	2.090 (1.615)	1.923	1.945 (.023)	1.930
Overall:	1.899 (1.248)	1.708	1.700 (3.548)*	1.926

* p < .10; ** p < .05; *** p < .01

¹ Mean scores based on four point scale.

² Figures in parenthesis are F ratios.

Conclusions

The findings of this study indicate that the premium which consumers must pay for auto insurance is the most important factor in determining the level of consumer satisfaction with a particular type of auto insurance. In fact, consumers in

Michigan, the no-fault state, had higher average insurance premiums than did those in Indiana (a median between \$401 and \$600 in Indiana compared to a median between \$601 and \$800 in Michigan) which probably explains the lower level of satisfaction with premiums for respondents from Michigan. If the consumer recognized a savings in time or legal expenses, which probably few did because of the low average number of claims filed, then the savings were not considered significant enough in the mind of the consumer to overcome the increased money costs.

Consumers seem relatively satisfied with auto insurance regardless of type. Almost all of the characteristics of insurance about which respondents were questioned had average responses between very satisfied and satisfied. The one exception was premium price where 64% of respondents reported themselves as dissatisfied or very dissatisfied. Based upon the results of an analysis of variance, consumers believe that value for money is a problem even if premiums are lower.

A limitation of this study is the relatively low levels of urbanization in the two counties sampled. It is possible that in highly populated areas where the chances of accident or theft are higher, consumers might be more satisfied with no-fault auto insurance, particularly the rapid claims response.

From a policy perspective, this study would suggest that legislators attempting to increase consumer satisfaction with auto insurance should focus on premium savings first. The results indicate that no-fault will only be accepted as superior to tort insurance if it can be shown to reduce the price the consumer must pay for auto insurance. So far, at least for those in Branch county, it has not.

References

- Bowman, L. (1989, February 1). Car owners rev up revolt on insurance. USA Today, pp. 1-2.
- Brostoff, S. (1989, March 6). Drivers hit auto rates; Want industry reforms. National Underwriter, pp. 4, 37.

- Calise, A.K. (1991, April 15). Pennsylvania auto reform bill takes its toll on insurers. National Underwriter, pp. 19, 29.
- Dauer, C. (1991, May 27). Court backs New Jersey auto reform law. National Underwriter, p. 3.
- Formisano, R.A., Olshavsky, R.W., & Tapp, S (1982). Choice strategy in a difficult task environment. The Journal of Consumer Research, 8, pp. 474-479.
- Insurance Research Council (1990). Auto Insurance Reform: Public Views of Ideas for Reducing Costs and Speeding Settlement of Auto Insurance Claims. Oakbrook, IL: Author.
- Johnson, J.E., Flanigan, G.B., & Weeks, J.K. (1983). An empirical investigation of the costs of adopting no fault insurance systems, 1971-1980. Journal of Insurance Regulation, 2, 168-175.
- Kittle, J. (1990, May). Auto insurance: Defusing the bomb. Best's Review, pp. 22-26, 114-115.
- Knowles, R.G. (1990, February 26). Georgia orders auto rate freeze, cap. National Underwriter, pp. 2, 14-15.
- Knowles, R.G. (1989, June 26). Nine out of ten would pass prop. 103. National Underwriter, pp. 31-32.
- Kochanowski, P.S. & Young, M.V. (1985). Deterrent aspects of no-fault automobile insurance: Some empirical findings. Journal of Risk and Insurance, 52, 269-288.
- Landes, E.M. (1982). Insurance, liability, and accidents. Journal of Law and Economics, 25, 49-65.
- Lynch, G.C. & Blades, H.C. (1974, December). Texarkana finance rates: The retailers dilemma. Texas Business Review, pp. 289-294.
- Maher, T.M. (1989, December 18). Giving back more on the auto policy. National Underwriter, p. 19.
- Meier, K.J. & LaFollette, R.M. (1987). The policy impact of no-fault automobile insurance. Policy Studies Review, 6, 496-505.
- Mulcahy, C. (1990, January 8). Is Michigan the next California. National Underwriter, pp. 17-18.
- Mulcahy, C. (1989, November 6). Public, industry unity urged to control costs. National Underwriter, pp. 3, 16.
- Stimpson, H. (1989). Massachusetts mirage? Insurance Review, 50, 36-40.
- Todd, J.D. (1976). The costing of no-fault automobile insurance. The Journal of Risk and Insurance, 43, 431-443.
- U. S. Department of Transportation (1985) Compensating Auto Accident Victims: A Follow-up Report on No-Fault Auto Insurance Experiences. Washington, D.C.: Author.
- Wenck, T.L. (1980). Michigan's no-fault automobile insurance. Michigan State Economic Record, 22, 1-3, 7.
- Witt, R.C. & Urrutia, J. (1984a). An overview and assessment of no-fault plans. CPCU Journal, 37, 10-24.
- Witt, R.C. & Urrutia, J. (1984b) No-fault versus tort liability compensation: Some empirical evidence. CPCU Journal, 37, 181-191.
- Wojcik, J. (1990, October 8) Proposition 103-type initiative before voters in Arizona. Business Insurance, pp. 2, 98-99.
- Zador, P. & Lund, A. (1986). Re-analyses of the effects of no-fault auto insurance on fatal crashes. Journal of Risk and Insurance, 53, 226-241.

Credit Education for the Disadvantaged Consumer
(Panel Summary)

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Credit education often misses consumers who need it the most. A joint project of the National Coalition for Consumer Education (NCCE) and AT&T Universal Card Services, Inc. provides grants to help low income, low literate, and otherwise disadvantaged consumers become better equipped with the lifelong skills to make wise credit decisions. This panel discussion familiarized participants with the NCCE/AT&T Consumer Credit Education Fund, showcased two projects supported by the Fund, and outlined strategies for teaching credit principles to disadvantaged consumers.

The Challenge

Disadvantaged consumers, rather they be low income, low literate, mentally disabled, or non-English speaking, have one characteristic in common--a daily struggle in the financial marketplace. Without appropriate consumer competencies to make decisions, or sufficient money to rebound from errors, disadvantaged consumers find themselves targets for fraud, bad deals, and temptations that lead to mismanagement. Credit, an essential financial tool if handled correctly, is a prime problem.

Fraudulent credit grantors prey on disadvantaged consumers' two weaknesses--bad credit report and denial for credit. According to the U.S. Federal Trade Commission (FTC September, December 1991), credit repair and advance-fee loan scams cause the most problems.

There is a brisk business among so-called "credit repair" companies that charge from \$50-\$1,000 to "fix" a credit report. Most companies vanish once the money is in hand. Consumers fail to understand there are no easy cures for an ailing credit history unless, of course, there are genuine mistakes in the report.

Other companies "guarantee" consumer and small-business loans for a fee, ranging from \$100 to several hundred dollars, paid in advance. Again, once the con artists get the up-front money, they disappear. Consumers fail to understand that, though legitimate credit grantors generally charge fees to process a loan application, they never guarantee an applicant will qualify.

Disadvantaged consumers also are victims of legitimate, but bad, deals. Rent-to-own programs (Swagler 1989) are one prime example. Consumers are lured by low payments on appliances or furniture with the promise of eventual ownership. Other attractive features are quick

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delivery, no down payment, and no credit check. Consumers fail to understand that if one payment is missed, the company takes the merchandise. Also the "low weekly payments" add up to an exorbitant total and do nothing to establish a credit history for the consumer.

Finally, credit mismanagement, which can challenge anyone, is especially prevalent among disadvantaged consumers. Credit often is misused as a source of income to meet monthly obligations or as a way to possess wants, not needs. Another problem is to equate credit with status--often to the point of putting the minimum amount on a monthly balance as a higher priority for payment than necessities such as food and utilities.

The Response

With education, disadvantaged consumers can learn how to do for free what a credit repair company might offer. With education, guaranteed loan scams can be avoided. With education, the total, rather than week-to-week, costs of rent-to-own deals can be understood. With education, consumers can be equipped with the skills to use credit to their advantage.

That was the hope of the AT&T Universal Card Services Corporation, Jacksonville, Florida, in April 1990 when it earmarked \$1 million to be used over a four-year period for consumer credit education grants. AT&T linked with the National Coalition for Consumer Education (NCCE) to manage the NCCE/AT&T Consumer Credit Education Fund.

NCCE, now in its 12th year, brings together business, consumer groups, educators, media, government, and community agencies as equals to focus on consumer life skill education in the community and work place. Through the Consumer Credit Education Fund, NCCE and AT&T bring resources to local, non-profit organizations for the delivery of consumer education.

For the first funding year, 1991, the 12-member Fund Advisory Board sought proposals for education reaching disadvantaged consumers. Nearly \$200,000 was distributed to 21 community-based programs (Koehler 1991). More than 350

proposals were received, a strong indication of need. Sustained interest by non-profit organizations (e.g., State and County Extension Services, Better Business Bureaus, Consumer Credit Counseling Services, State Offices of Consumer Protection) is expected throughout the 1992, 1993 and 1994 funding cycles. Following are summaries of two projects.

Target--Working Poor Hispanics

The pilot audience for this project conducted by the Florida Cooperative Extension Service was Hispanic, low-wage service workers (e.g., maids, ground crews, bell hops, and kitchen help). Their employers, major hotels on Marco Island, bus the workers from their homes daily.

Hispanics have special needs, since in addition to low wages, there are cultural differences, language differences and non-exposure to credit in their homelands. Many have been denied credit due to low income or poor money management skills. Others may only have access to credit with higher interest rates, some may not know about credit options, while others may be over-extended.

In an effort to have these Hispanic workers improve interaction with hotel guests, English was taught to the workers on company time. The Extension project provided consumer credit education during these classes and on the daily bus rides. Educational materials were prepared in written form with both English and Spanish on the same page. Audiotapes, for use on the bus, and a videotape also were prepared. Outcomes were measured by using a pre-post test.

Target--Mentally Handicapped Adults

The number of mentally handicapped adults living in group homes is increasing as the trend to move people out of institutions and into "normal" lifestyles widens. Westmoreland County Community College, in cooperation with the Westmoreland County Association for Retarded Citizens and Mental Retardation Department, began to develop enrichment programs for these people in 1986. The underlying purpose of this programming

was to enhance their lifestyles by developing an increased sense of self-esteem.

The community college is a natural setting for such programming. Mentally handicapped adults are often treated as children. College attendance is thought of as an adult activity; therefore, the exposure of this group to college facilities provides them with a sense of "belonging" to the normal population.

Classes marketed as "College Just for You" were first offered in 1987. Topics included introductory biology, chemistry, robotics, watercolor painting, music, personal grooming and fitness. After receipt of the Consumer Credit Education Fund grant, the Consumer Credit Literacy Skills classes were added.

The 62 students were higher functioning, Supplemental Security Income recipients who worked, or planned to work, part-time. These adults take responsibility for handling personal finances, with limited supervision. They require continuous reinforcement of money management skills to assure they live within their means.

Strategies

As the panel interacted with participants, these strategies for educators of disadvantaged consumers became evident:

- For many consumers, credit is most effectively taught in the context of the total personal money management process.
- Educators of disadvantaged consumers face heavy commitments before knowledge is gained and monumental rewards when behavioral change is evident.
- Education must come to people on their terms, where they are receptive, and when they have the time. Work place education, community-based education, and education around social services such as health centers, day care centers, and Head Start Programs provide access to the disadvantaged consumer.

- Educators must be sensitive to the cultural differences of groups. The United States IS NOT a melting pot. Social, economic, and physical groups affect actions, spending patterns, and learning modes.

- Sufficient information and materials exist on credit. The priority now is delivery of this information, in terms and situations understandable to the audience.

And, finally, a plea to the financial services industry--follow AT&T's lead in supporting consumer education. In an era of economic downturn and financial insecurity for many consumers, business leaders, government officials, researchers, and educators must all take responsibility for improving the credit literacy of Americans.

References

- Federal Trade Commission. (December 1991) Alert for consumers: Advance-fee loan scams, 2 pp.
- Federal Trade Commission. (September 1991) Facts for consumers: Credit repair scams, 2 pp.
- Koehler, J. (1991) NCCE/AT&T Fund awards grants in 21 cities. Advancing the Consumer Interest, 3(1), 36-37.
- Swagler, R. & Baschon, C. (1989) Consumer protection: Rent-to-own programs in New York. Advancing the Consumer Interest, 1(1), 30-31.

The Journal of Consumer Affairs:
On Being a Reviewer, Author, *et al.*

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The issue of *JCA* (Volume 25, Number 2, Winter 1991) sent to ACCI members and subscribers in December 1991 marked 25 consecutive years of publication of the *Journal*. This is a milestone for ACCI and the *Journal*. In addition to recognition of this milestone, the workshop panel explores the roles of authors, reviewers, editors, and readers with the intent to encourage greater participation in the workings of the *Journal* and to gain ideas from the audience to enhance the role of this scholarly journal.

A panelist and former editor, Robert Herrmann, captures the role of *JCA* in our field when he stated,

We had several goals for the *Journal* when I was working with Rex Warland as associate editor. I thought it was very important to get a journal that was intellectually and academically respectable, one that would carry appropriate points for your professionals in the battle for promotion and tenure, one that they would be proud to contribute to. Also, we wanted something that would make a real contribution to the field. So, we were always trying to balance multiple goals, particularly the need to try to help young professionals publish, and at the same time hold standards high and publish useful stuff that would have a useful impact" (Merchant, 1987, pp. 257-258).

How did *JCA* get started? After much discussion on the part of members (see Merchant,

1987 for more details), David A. Swankin presented the following challenge at the 1966 conference--26 years ago.

And so I ask: Could not CCI undertake to publish a professional journal in the consumer field? Is not the talent right here in this room to assure it being of first-rate quality--and self-supporting at that? Is there any other activity CCI could engage in that it would do better and more effectively, and fill a void as great as this one? And finally, if CCI says "no" to the proposal, who is likely to say "yes"?" (Swankin, 1967, p. 12).

For newer members, ACCI was CCI--Council on Consumer Information--at that time.

The first issue of *JCA* included this message from editor Gordon E. Bivens.

It is a pleasure to welcome you as a reader--and potential contributor--to *The Journal of Consumer Affairs*.

The primary objective of the *Journal*, as determined by the CCI executive committee, is to report consumer-focused research. Secondly, it shall serve as a forum on consumer issues, present book reviews, and perform related functions appropriate to a scholarly/professional journal dedicated to facilitating and improving the performance of consumer affairs professionals whose academic and/or professional training and current activities cover a variety of fields and

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disciplines. In this sense, the *Journal* recognizes as one of its prime functions that of making available the research findings of a number of disciplines which have a major thrust toward understanding the consumer, his behavior, and the implications of his economic, social, legal, and political environment.

In view of today's inundation with the printed word, a few comments might be in order about "Why another journal?" Individual articles in this and future issues of the *Journal* might have appeared in other journals (though, admittedly, some of the journals of the traditional disciplines seem not to reflect the ground swell of activity in the consumer field), but, except for those whose journal-reading scope covers an extremely wide range, any such articles would go unnoticed by consumer specialists in other disciplines. Thus, it is hoped this *Journal* will bring a focal point for reporting the consumer-oriented research, progress reports on action programs in consumer affairs, exchange of reasoned viewpoints on public consumer issues, book reviews, replies, new notes, and other items of interest to scholars, teachers, students, and professional activists with a major, or even a minor, part of their activities in consumer affairs.

We believe this assessment of need for a journal is accurate and hope that you will contribute to the *Journal* by offering manuscripts for consideration for publication, by sending replies or notes about articles which appear, progress reports of projects, and in other ways become involved in creating as well as "consuming" future issues." (Bivens, 1967, pp. 5-6).

These words as well as those of Swankin and Herrmann illustrate the quality of thought in those supportive and instrumental in the development and progression of the *Journal*.

Twenty-five years of the *Journal* have enabled the publication of 294 papers, 237 viewpoints and communications (also labeled research notes, comments, shorter papers), and 297 book reviews

in 50 issues. In the Winter 1984 issue (Volume 18, Number 2) a cumulative index of the first 17 years of the *Journal* and 20 annual proceedings was included. It contains both author and subject indices.

In noting the role of the *Journal* in the field, it is important to recognize the six editors who have diligently worked to foster and continue the purposes of *JCA*. The editors and years of service are Gordon E. Bivens, 1967-1973; Joseph N. Uhl, 1974-1977; Robert O. Herrmann, 1977-1980; Monroe Friedman, 1980-1983; David B. Eastwood, 1984-1990; and Carole J. Makela, 1990-.

For those interested in the development and progression of the *Journal* (in addition to the *Oral History*, Merchant, 1987), articles reviewing selected periods of the *Journal* provide insight into trends for the topics included (Geistfeld and Key, 1986) and interdisciplinary nature of the manuscripts included (Drennen and Makela, 1990).

JCA has become an important journal in the achievement of tenure for faculty. Beginners as well as established members of the organization are published in *JCA*. It is important that a range of research methodologies and topics sufficiently address the present and future concerns of the field. The quality of *JCA* needs to be maintained.

The editor of a blind-refereed journal acts as the coordinator, not the controller. Authors and reviewers are the main forces behind a journal's content. An editor, cannot publish on a topic for which no manuscript is received and/or deemed publishable by the reviewers. As we look to the future of *JCA*, let us explore the roles and expectations involved in having a quality scholarly journal respected in the field. Gleser termed scientific research and its publishing as a "community activity" (1986). It is not the lonely activity we think it is.

Authors

Journals need to receive quality manuscripts to be able publish articles that add to the knowledge

of the field while fulfilling the objectives of the journal.

A basic responsibility of the author is to submit an original piece of work which has not been published elsewhere and is not under review elsewhere. Preparation of different papers, based on the same research but aimed at different audiences, may be appropriate. When authors plan two such submissions to different journals, they should explain their plans carefully to both editors and be certain the plan is acceptable.

Manuscripts should make a clear contribution to the literature of the field. For *JCA* this means that the results should have clear implications for consumer interest including protection policy. Other journals may be more appropriate outlets for descriptive papers on consumer behavior without clear applications to the formulation of policy, to consumer education or information programs; most demand and price analyses without clear consumer policy implications; and consumer behavior papers with implications for marketing management.

Authors should study the editorial statement and recent issues of a journal to help determine whether their paper is an appropriate submission. However, they should not assume a topic is not appropriate simply because a journal has not recently published any articles on it. If in doubt, the author does have the option of telephoning the editor for a judgment. A discussion of both topic and focus is important. This can save an unnecessary review and help the author find an appropriate outlet more quickly.

In a paper, its potential contribution and objectives should be spelled out clearly within the first two or three paragraphs. Some authors get into extensive preambles about the importance of a problem and leave the reader guessing far too long what the paper is about.

The theoretical/conceptual framework is a critical part of any paper, providing a basis for the analysis. Because the consumer field is interdisciplinary, a wide variety of sources may be useful. A common problem is that authors assume that nothing relevant has ever been published on the

specific problem. This is seldom true, especially if one searches well and checks related fields.

Authors should recognize that *JCA*, as an applied journal, has an audience with varying levels of statistical expertise. Authors should consider these variations in the presentation of their statistical analyses and results. Authors should help readers by including parenthetical phrases explaining the use of statistical techniques (e.g., "the independence of the distribution of X from the distribution of Y was tested with Chi-squared analysis"). Authors also can help readers by presenting results in graphic and tabular forms. Examples also can be helpful (e.g., results indicate that with an income increase of \$1,000 a household with the characteristics discussed can be expected to spend \$200 more for food).

Authors also can help readers understand complex analyses by re-estimating using simpler techniques. For example, once a complex interaction has been found using multivariate techniques, show it with a simpler technique. The complex analysis may then go into an appendix. In many cases, authors must choose, whether they wish to impress, inform, or convince readers. Too often displays of statistical pyrotechnics seem designed mostly to impress or to present computer output with little author input as to its relevance.

A weakness of many manuscripts is that the discussion and conclusions do not follow logically from the statistical results nor do they show in-depth thinking. A recent analysis of submissions to American Psychological Association journals (Fiske and Fogg, 1990) found this to be the most common problem in the sample of submissions reviewed. The problems fall into two general categories--the discussion was poorly linked to the results or the interpretation and conclusions were poorly developed. Too many authors seem to be exhausted by the time they have presented results and short-change or omit interpreting results or presenting implications. Attention needs to be paid to discussion of research needs and to logical implications for use in the marketplace. It is translating the implications into "real world" content readable by those in some of the social sciences who have difficulty understanding economic jargon. This may be needed to develop

interest in consumer literature in others including policy makers. In the discussion section, authors should point out limitations of the study and their effect on the results. They also should link the results to other works. Do the results support or contradict the work of others?

From the perspective of presenting the paper, it should be held to a reasonable length. An exceptional paper may merit extra space. The Journal of Consumer Research reviewer's sheet calls for an assessment of the length-to-contribution ratio (Monroe, 1990). This is a good way for authors, reviewers, and editors to think about appropriate length.

Clarity of presentation depends on short sentences and short paragraphs. Generous use of sub-headings also helps. Many authors use overly abbreviated computer labels for variables. This is an imposition on the reader. Space may be saved but clarity is lost and reading time extended. A number of editors suggest that authors get a colleague to read their paper before submitting it. Trading this favor back and forth may make it less burdensome. Too many papers appear to have never been scanned by human eyes (or by a spell-checker, for that matter) before they are submitted. Grammar checks or other writing analysis software can also be helpful as these often catch the correctly spelled but incorrectly used words ("of" for "or").

Catch the typos!!! Try to adhere to the specifications of the journal, though it is unlikely a manuscript is rejected because the first draft did not adhere exactly, especially if it is a resubmission. If it is a resubmission, at least make changes to make the topic appropriate for the journal. Make sure all references are included, accurate and complete (Rudolph and Brackstone, 1990).

The author's role can be summed as noted by Hamermesh (1992). He indicated that manuscripts are ready for submission the draft before what the author might consider to be final--after review by colleagues and at least one presentation. That means in front of peers during a seminar, at ACCI, or other meeting. What does this do when things are published in proceedings? Proceedings are shorter versions of papers needing refinement. Ask

for feedback from colleagues even though they may be pressed for time. The reciprocation is a vital part of the "community activity."

After a manuscript has been accepted and prepared for publication, a crucial responsibility of the author is to check the galley carefully. Editors or their proofreaders do this too, of course, but the article is printed under the author's name. The number of mistakes in titles, headings, table titles, and text which get into print is surprising.

Reviewers

"There are so many things wrong with this paper I won't begin to outline them."

"You can not use the framework you chose to study this question."

These are not the best ways to begin a review. An author received the first comment on one manuscript and the second on two others (not even the same subject). These types of comments discourage the researcher, especially the young scholar. Instead, the reviewer should point out the good things about the paper first.

Suggestions for the author should be offered diplomatically. Criticisms should be directed at the paper, not the author personally. Hypercritical comments are hard on morale and seem to be beyond the bounds of collegiality. Such comments seem to be an increasing problem both at JCA and elsewhere (Monroe, 1990). In these difficult times, we have a vested interest in making our field as strong and effective as possible. Constructive criticism offered thoughtfully helps us all.

As for the second comment, new theories and applications are developed through innovation. Many reviewers (as is the case with most humans) are averse to change and newness. A reviewer should be open to new ideas, if they are clearly presented and substantiated.

Reviewers should not expect authors to rewrite a paper to conform to the reviewer's vision of an ideal handling of the problem, be that theory, methodology, analyses, and/or applications. The paper is the author's creation. The reviewer should

help improve it for the reader and the field, not try to reconstruct it.

Reviewers look for acceptable manuscripts with a few general characteristics. First, they flow logically throughout from introduction, review of literature, theory, methods, results, conclusions, and discussion. For the most part, papers reviewed for *JCA* and rejected have been missing adequate treatment of theory or development of conclusions.

The chief responsibility of the reviewer is to help the editor assess the significance of the contribution which the author(s) made. This involves assessments of the conceptual framework, appropriateness of the analytical technique(s) and correctness of its use, and the usefulness of the results. For this, reviewers draw on their knowledge of the literature and the discipline.

Most editors agree, perhaps a bit reluctantly, that the reviewer is not responsible for catching all possible errors. This, in the beginning and the end, is the responsibility of the author. Yet inadequacies in presentation are distracting to reviewers and may be reason for concern, "Will the grammatical, spelling, and other presentation errors be corrected before publication?"

Reviews assist authors not only by the service they render. Well-stated strengths and weaknesses of a manuscript enable the author to respond and revise more effectively.

Other responsibilities of reviewers relate to the timeliness of the process. In cases where reviewers feel they are unable to assess some parts of a paper, they should indicate this to the editor. This does not preclude assessment of the paper. In cases where they are unable to assess major components of a paper, the paper should be returned promptly to the editor with an explanation.

Likewise, reviewers need to abide by the time guidelines provided by the editor. Based on looking at the efficient use of resources, reviewers must realize that when they sit on articles for weeks/months past deadlines--efficient use of resources of all involved (editor, writer, etc.) is not being achieved.

Further information on the role and techniques of reviewing are found in literature (Blank, 1991; Shriver, 1990; Smith, 1990). A compilation of these will be developed for *JCA*.

Editor

The chief responsibilities of the editor is to ensure that authors get a prompt and fair review and that the journal is published. *JCA* editors have done a pretty good job, over the years, of holding reviews times down. To do this, the continuing cooperation of reviewers is essential. Currently most responses to authors are sent three to four months after receipt of the manuscript. Any author who has not gotten a response after four months should inquire about the status of their paper. Manuscripts do get lost and mislaid or additional reviews may be necessary.

When a decision has been made, the editor should communicate this to the author as clearly as possible. Some journals have codified the possible responses to help make them clear to authors and to force editors to decide what disposition they want to make of a manuscript. The *Journal of Consumer Research* (Monroe, 1990) offers reviewers six alternative from which to select in advising editors:

Accept unconditionally

Accept subject to minor revisions - no further reviews will be done

Encourage revision in accordance with accompanying comments - manuscript has potential, but has serious deficiencies, further review will be needed

Reject in current form but allow resubmission of a substantially different version as outlined in author comments - manuscript is seriously flawed, but salvageable; reconceptualization or reanalysis may be required

Reject, despite some merit, because the likelihood of successful revision is remote - several serious problems exist

Reject unconditionally - has no potential even with revision, trivial or inappropriate topic, flawed data set.

The use of this or a similar set of categories should be considered for use by *JCA* reviewers and the editor.

Presently, *JCA* uses five categories--accept, as is; accept, needs minor revision; marginal, needs revision; very marginal, needs major revision; and reject. Reviewers often select "an in-between" category and/or reviewers select disparate categories (i.e. accept, needs minor revision and reject).

Editors sometimes receive papers which are well-executed but deal with minor topics, have a limited scope, or add little to knowledge. Flawless execution does not make up for a trivial topic. Such papers make little contribution and as space is limited in journals especially those published semi-annually, editors usually conclude that there are more valuable inclusions.

Readers

Readers have dissimilar purposes for scanning or reading a journal. Yet whether their purpose is ideas for application, foundation knowledge for research, applicable methodologies, or status of the field, readers should find the articles readable and generally understandable. Granted the details or finer points of a methodology or analysis may need study, their presentation should not discourage reading and understanding the article.

What makes manuscripts reader-friendly? Easy writing--don't use million dollar words (Bachtel, Walters, and Eastwood, 1986). If the author writes tightly, as noted previously, the reader will be much the better for it.

The reader should be able to expect. (1) Tables that stand alone with variables labeled clearly, not X1, X2, X3, etc. (often seen in path analysis) or computer labels. (2) Logical progression from introduction, review of literature, ..., to thoroughly thought out implications. (3) Adequate references that help others progress in the field as well as reflect the author's understanding of the field. Published papers with seven or fewer references are unacceptable unless someone is charting absolutely virgin territory. (4) An understanding of the article without numerous rereadings. Three is suggested as the limit. For general understanding and information one reading should be enough for most *JCA* readers.

Summary

The Journal of Consumer Affairs has achieved 25 years of publication with the contributions of the time and efforts of many authors, reviewers, readers, editors, and ACCI officials and members. Continued interest and participation in the process from initial manuscripts to reader friendly published articles are essential. ACCI members participate in most of the process. Yet we are concerned that in 1991 65 percent of the authors or co-authors were not ACCI members. *JCA* needs all ACCI members as authors, reviewers, and readers.

References

- Bachtel, D.C., Walters J., & Eastwood, D.B. (1988), "Avoiding Rejection: A Practical Primer on Submitting Articles to Social Science Journals." *Family Science Review*, 1(3), 245-249.
- Bivens, G.E. (1967). "Editorial Note." *The Journal of Consumer Affairs*, 1(1), 5-6.
- Blank, R.M. (1991). "The Effects of Double-Blind Versus Single-Blind Reviewing: Experimental Evidence from *The American Economic Review*." *The American Economic Review*, 81(5), 1041-1067.
- Drennen, N.H. & Makela, C.J. (1990). "Analysis of *The Journal of Consumer Affairs* References: Journals and Their Disciplines." In *Enhancing Consumer Choice*, R.N. Mayer (ed.). Columbia, MO: ACCI, 541-550.
- Fiske, D.W. & Fogg L. (1990). "But the Reviewers Are Making Different Criticisms of My Paper! Diversity and Uniqueness in Reviewer Comments." *American Psychologist*, 45(5), 591-598.
- Geistfeld, L.V. & Key R. (1986). "A Decade in Perspective 1975-1984: Focus and Trends in *The Journal of Consumer Affairs*." *The Journal of Consumer Affairs*, 20(1), 65-76.

Gleser, L.J. (1986). "Some Notes on Refereeing."
The American Statistician, 40(4), 310-312.

Hamermesh, D.S. (1992). "The Young
Economist's Guide to Professional Etiquette."
Journal of Economic Perspectives, 6(1), 169-
179.

Merchant, M. (editor). (1987), *The American
Council on Consumer Interests: An Oral
History, 1954-1984*. ACCI.

Monroe, K.B. (1990). "JCR Statement of Review
Policy." *Journal of Consumer Research*,
17(September), no page number.

Rudolph, J. & Brackstone, D. (1990). "Too Many
Scholars Ignore the Basic Rules of
Documentation." *The Chronicle of Higher
Education*, 36(April 11), A50.

Shriver, B.D. (1990). "Editor-in-Chief's Message:
The benefits of quality refereeing." *Computer*,
23(4), 8-16.

Smith, A.J. (1990). "The Task of the Referee."
Computer, 23(4), 65-71.

Swankin, D.A. (1967). "The View from
Washington." *The Journal of Consumer
Affairs*, 1(1), 7-12.

**The Consumer's Role
In A Changing Marketplace**
Address By

Jim Edwards, M.P.¹

Ladies and Gentlemen, it gives me great pleasure to address the 38th Annual Conference of the American Council on Consumer Interests. Mr. Blais regrets that he could not attend today and that this is the first time your organization has ever held one of its gatherings outside of the United States. On behalf of all Canadians I would like to welcome you to our country, and extend my best wishes for an enjoyable visit.

I was invited to speak to you today about The Consumer's Role in Our Changing Marketplace. In particular, I would like to look at the role consumers can play in helping governments protect them and the ways we can include consumers in framing marketplace legislation. Finally, I would like to forecast a bit about the future of consumer protection in light of marketplace changes.

Systems in Canada and the United States are not always similar. However, with regard to the issues I have just sketched, out two countries face many of the same economic and consumer challenges. Both nations are working their way to economic recovery. Both face major challenges with regard to competitiveness and prosperity. Changing conditions are affecting our marketplace, and the way consumers must operate within them.

Role of Consumer and Corporate Affairs

In Canada, the mission of the Department of Consumer and Corporate Affairs is to promote "The Fair and Efficient Operation of the Marketplace." We carry out activities in areas which, in the United States, would be the responsibility of several different federal departments.

Perhaps the easiest way to understand the role of the department is simply to view it as the "Department of the Marketplace."

¹Parliamentary Secretary to the Minister of Consumer and Corporate Affairs

A Market needs both buyers and sellers. Consumer and Corporate Affairs Canada has worked with both groups to ensure that Canada's markets operate fairly and effectively. As you are undoubtedly aware, protection of consumers cannot be effectively achieved without the cooperation of business.

In the consumer field, the department sets and enforces standards for some products and services, and guarantees correct weights and measures. Where necessary it ensures that proper information is made available about products and services, and informs consumers about available choices. It minimizes the hazards related to certain products through the issuance of safety standards and information. It provides protection mechanisms for our most vulnerable consumers.

Many of the department's corporate activities also have a direct or indirect bearing on consumers. It maintains and encourages the free circulation of goods and services in a climate of healthy competition and establishes a clear framework within which businesses can operate. A strong guiding principle in this regard is that consumers are the ultimate beneficiaries of a prosperous and competitive business sector.

As you can see, the mandate of Consumer and Corporate Affairs Canada is multifaceted. Essentially, its overall objective is to try to ensure that the Canadian marketplace is equitable for consumers, is dynamic and innovative, and contributes to the prosperity of Canadians in all regions of a country which is geographically very large.

The fact that many of the department's framework policies to protect consumers have been functioning for a very long time (20 to 25 years, in some cases) does not make them any less important. Indeed, some would argue that they are so important and they have become entrenched to such a degree that we have come to take them for granted.

At the same time, we must be careful that we are not blind to the need for change. Dynamism and innovation will need to be stressed as the nineties will undoubtedly see dramatic changes in the consumer/marketplace relationship.

Ironically, the nineties will have to address the needs of our most assertive consumers as well as those of our most vulnerable consumers.

I think we are already witnessing a growing consumer assertiveness in the marketplace. Today's consumers are less willing to have choices made for them. They are still looking for the best information and the best prices. They still want product popularity of the so-called "green" or environmentally-friendly products has shown that consumers want the firms they patronize to prove their ethical behavior and social consciousness.

The concerns of more vulnerable consumers in an increasingly complex marketplace also need to be addressed.

In spite of well-developed public education systems, significant proportions of the populations of all OECD nations have literacy and numerical skills which are not adequate to enable them to function with confidence in the marketplace. Changing immigration patterns are bringing to our countries people who are unfamiliar with our marketplace practices and people who do not speak or read the host country's language.

Additional consumer issues might also emerge related to the ever-increasing proportion of our population composed of older people.

I think it is safe to predict that the importance of the consumer's contribution to overall economic prosperity will become more and more recognized. Consumers are often neglected and even ignored in terms of larger economic issues.

Here in Canada, for example, consumers account for 60 percent of final demand for goods and services, as opposed to 20 percent each for business and government. For all the reasons I have cited, it will no longer be possible in the future to dismiss consumers as invisible, unthinking or automatic contributors to the economy.

Therefore, as we work our way out of the recession and towards prosperity, the role of the consumer in today's rapidly changing marketplace will be of tremendous importance.

I would also argue that the consumer issues that are emerging in Canada today are characteristic of trends throughout industrialized economics; the way in which the consumer/marketplace relationship is evolving in Canada has a general relevance to other economically developed nations.

Many of the very significant changes which are having an impact on the Canadian economy are also being faced by other industrialized nations in today's global environment. A brief look at the evolving marketplace of the 1990's can help show the role of the consumer in the economic transformations which are taking place.

Changes in The Marketplace

A. Technology

First of all, rapid advances in technology have profoundly changed the marketplace. They have also caused a shift in focus from the making of products to the delivery of services. Technological advance can bring many benefits to the consumer as end user -- for example, with electronic banking.

Yet at the same time there is growing skepticism among consumers as to whether new technology is always genuinely practical, and whether its cost efficiencies will always be passed along to consumers.

All consumers - children and adults love new toys and gadgets. But business and consumer publications have recently noted that there comes a point when we may have "too many bells and whistles."

For example, in its November 1991 issue, Consumer Report noted that, if a microwave oven has ten cooking levels, people will generally use only five of them. If enhanced choice for its own sake increases price without providing noticeable benefits, consumers may begin asking; "Why pay more?"

This is not to say that consumers wish to

forego the benefits of technology that they expect to share: lowered costs, improved quality and more and better products.

But there is a down side to technology as well.

Technological advances affect the use of telemarketing and electronic data banks and consequently increase the risk of threats to privacy.

Technology might also create information problems for those who do not have suitable levels of technical literacy. There is a further danger that technological change could widen the gap between consumers able to cope in the marketplace and more vulnerable consumers.

B. Harmonization

Harmonization is also having a growing impact on consumers. The emergence of trading blocks and trading agreements in the contemporary world is continuously exerting pressure for countries to harmonize their practices and standards; this naturally has implications for consumers.

For example, as a trading nation, Canada is highly sensitive to the actions of its major trading partners. The new U.S. Nutrition Labelling and Education Act is a case in point.

The act, as you know, requires mandatory nutrition information on the labels of most packaged food sold in the United States. The United States is a huge market for Canadian food exports. Not surprisingly, Canadian business has been asking is we are going to harmonize our nutritional labelling requirements with that of the U.S. In order to answer this questions, Consumer and Corporation Affairs Canada is working together with consumer and business groups to consider the best approach for Canada.

These and other trends in today's globalized and harmonized marketplace will inevitably affect individual consumers. For example: what might happen to consumers if a domestic business community felt that it was put at a competitive disadvantage by having to comply with national standards that its international competition did not have to meet?

C. Costs of Consumer Protection

There are other questions as well. How can we determine the cost on business -- in dollars and in competitiveness -- of regulations and programs designed to protect consumers? Is the game worth the candle? Since these costs are likely passed on to consumers, how much protection can we afford to pay for, as consumers and as taxpayers? Conversely, would costs -- economic, health, safety -- simply be shifted to other marketplace participants if the way this burden was apportioned was to be changed?

All of these issues have potentially enormous implications for consumers. This is why Consumer and Corporate Affairs Canada is trying to keep abreast of today's changing marketplace by conducting a systematic review of the appropriateness of our consumer policy, legislation and programs. The Department is making a concerted effort to understand the climate facing Canadian consumers.

We are scrutinizing the impact of traditional government interventions targeted directly at consumers -- such things as safety measures, labelling information and product standards. But it is now very clear that this traditional limited approach is no longer adequate. Consumers' interests go for beyond simple protection.

We are therefore looking at marketplace policies that establish structural rules: policies on competition, environment, international trade, industrial development, transportation and agriculture. We are also looking at how broad government policies affect the capacity of consumers to function in the marketplace. The interests of consumers are reflected in the development of those policies.

New Approaches to Consumer Protection

No one would claim that these changes will be made easily. In Canada, as anywhere else, it will be a difficult task to formulate efficient new approaches to consumer protection. The goal of my government is to implement changes under the assumption that we wish to protect consumers effectively without jeopardizing economic competitiveness.

If governments wish to achieve this desired goal, several principles will have to frame any new approaches. First of all, governments should try to minimize any negative impacts which their consumer policies might have on the competitiveness of domestic businesses, in both national and international markets. After all, if any business is to be successful under the new economic order, it must be competitive.

Governments will also have to consider the costs of any programs, and the tax burden that they will represent to both constituents and businesses. In these times, which are universally characterized by shrinking budgetary resources, we will need to find new approaches and new ways to protect consumers effectively.

Around the world, our institutions are structured to reflect the values and meet the needs of a time that is rapidly sliding into history.

As Kenneth R. Hey pointed out in an interesting article in the January/February 1992 issue of Across The Board magazine: "Leaders in business and government need to restructure their institutions in terms of employer/employee relations, business/client relations, government/citizen relations and institutional relations to create a fit with the new consumer and citizen. That demands innovative thinking.

Redesigning and renovating are easy in an expanding environment, but are something else again in the midst of shrinking economic potential."

In the same ways that market economies are evolving, our consumer protection approaches are also undergoing profound changes. The two words that seem to best sum up the direction in which we need to go are responsibility and co-operation.

Obviously, governments are able to offer consumers some types of protection that they could not otherwise enjoy; for example, the testing and analyzing of products to set standards. But people are going to have to realize that government cannot solve all of their problems. They are going to have to take some responsibility into their own hands.

Among consumers, the old assumption was that "consumers are good, businesses are bad."

Businesses have acknowledged their responsibility to provide quality products and services, together with reasonable choice and information, at attractive prices. Consumers should offer them the courtesy of shedding their old assumptions.

The marketplace is an integrated whole made up on elements that are not only interdependent, but which actually stimulate one another. Protective measures and well-informed consumers can help businesses by encouraging them to improve the quality of their products and services -- and thereby help increase a business's level of competitiveness in larger markets.

Clearly, there is a need for co-operation in developing coherent consumer policies, at both national and international levels. However, the formulation of appropriate mechanisms to embody this co-operation is only just beginning. The slowness of the process is not only due to its complexity, but also to the difficulty of establishing a new spirit of trust among partners, to whose mutual benefit it is to co-operate.

If business, governments and industry seek new roles based on shared responsibility and co-operation, then consultation and partnerships become very important. Consumers need to be heard. They should have the opportunity to participate in policy processes. Consumer and corporate affairs intends to make its review of consumer policies public, in order to have maximum public input about possible future directions.

Consumers no longer want to be told: "listen to us, we know what's best for you," and governments will have to adapt to that reality.

However, if nations are to move on to a new model for consumer relations and consumer protection, new approaches, solutions and ways of managing will have to be found. Before walking away from our old structures and models, we need to ensure that newer, better, solutions are in place.

For example, the term co-operation has to be something more than a new suit of clothes for the old passivity. Co-operation should be based upon mutual respect among equal partners, who listen to

one another. It should not mean, "co-operate, and do as I tell you."

Within current realities, we need to "empower" consumers, and enable them to share in emerging partnerships with business and governments.

For all the changes in the marketplace, however, one thing will remain the same. Consumers will justifiably continue to expect a safe market, adequate choices, reasonable prices, and certain standards of market behavior.

An effective system of consumer policies and programs does not just assist and protect consumers -- it is an essential component in making the entire market system function fairly and efficiently to ensure prosperity. Given the importance of this underlying reality, I am confident that Canada and other nations will be able to forge effective partnerships, and meet the marketplace challenges of the next century.