Elderly and nonelderly expenditures on necessities in the 1980s

For much of the U.S. population, both real income and discretionary spending increased over the 1980s; elderly households, however, fared better, on average, than nonelderly households

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uestions concerning the well-being of the elderly population in the United States are central to the resolution of numerous policy questions, including changes in health care and Social Security, Federal budget deficits, and intergenerational transfers. After substantial growth during the 1970s, real social welfare expenditures under public programs grew more slowly through the 1980s.1 At the same time, the population aged 65 and older continued to grow, both in absolute numbers (from 25.5 million to 31.1 million) and as a share of the U.S. population (from 11.3 percent to 12.5 percent).2 The research presented in this article ties together the related issues of the growing elderly population and the flattening of growth of public social support programs.

Using data from the Bureau of Labor Statistics (BLS) Consumer Expenditure (CE) Survey, the article examines whether elderly households spent proportionally more on necessities in 1990 than in 1980. The article also compares elderly households with nonelderly households in both years, to determine their relative welfare. Because poorer households invariably have minimal spending discretion, having to allocate most of their expenditures to necessities, the measures of economic welfare used are real income and the share of total household expenditures on food, housing, and health care. Specifically, we address the following questions: (1) What changes occurred between the two survey years in expendi-

tures on necessities by elderly households, compared with nonelderly households? (2) What socioeconomic factors affected these expenditures? and, in particular, (3) Were there differences in expenditure patterns between recipients of cash assistance and other households?

Our findings reveal that over the decade, both discretionary spending and real income per household increased for most groups. However, recipients of cash assistance did not share equally with nonrecipients in the increases in household real income, although their real income did not decline. The group which realized the largest increase in well-being was elderly households that did not receive cash assistance.

Literature review

The well-being of many elderly Americans has improved substantially in recent years,³ due in large part to government transfer programs: Social Security, medicare, supplemental security income (sst), food stamps, subsidized housing, and, to a lesser extent, Aid to Families with Dependent Children (AFDC) and medicaid.⁴ Nonetheless, some groups among the elderly benefit less than others from a growing economy and government transfers, so the income distribution of older U.S. households reveals greater inequality than that of younger households.⁵

In earlier research published in the *Review*, Beth Harrison, using 1984 ce Survey data, found

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significant differences in expenditure patterns between older Americans aged 65 to 74 and those 75 years and older.⁶ Also in the *Review*, Pamela B. Hitschler compared CE Survey spending data for the same two age groups for 1980 and 1990, the period of the current study.⁷ She reported substantial increases in current-dollar income and expenditures for both groups, with decreases in expenditure shares for food and housing, but increases in expenditures shares for health care.

Focusing on lower income older households, D. R. Meyer and S. Bartolomei-Hill concluded that, while benefits vary considerably across States, elderly individuals receiving ssi cannot afford a basic needs package of housing, food, and medical care. They also found that elderly couples on ssi are generally better off than elderly single persons on ssi and that ssi benefits far exceed the benefits provided to elderly households by AFDC.

Research also has demonstrated that, when the level of income is held constant, (1) elderly consumer units spend less than younger ones, (2) the oldest of the elderly households have the lowest average propensity to consume, and (3) the elderly reduce consumption in order to avoid spending down their wealth. Households headed by a person aged 65 to 74 spend only 72 percent of the average expenditures for all households, and households headed by someone aged 75 or older spend just 51 percent of that average. In general, expenditure patterns of the elderly appear to conform to their high aversion to risk, perhaps related to their having experienced the depression of the 1930s and to their uncertainty regarding their future health and length of life. The patterns may also be influenced by the accumulation of durable goods already owned by older households.

Another way to assess household well-being, especially for the elderly, is by analyzing the distribution of expenditures on different categories of goods and services. Comparing spending patterns of the elderly and nonelderly, researchers have found that the elderly spend larger shares of their total expenditures on necessities: housing, health care, and food. Other studies that compared the spending of retired and nonretired households reached similar conclusions, finding that the retired spend significantly larger shares of total expenditures on housing, food at home, and health care and lesser shares on transportation and food away from home.

Our study expands previous research by comparing expenditures of elderly and nonelderly households over the 1980s and by grouping households on the basis of financial assistance. Particular emphasis is placed on the role and impact of transfer payments on spending patterns among the groups in order to determine which socioeconomic factors affect spending on necessities. The aim is to ascertain the change over the decade in the absolute and relative well-be-

ing of elderly and nonelderly households through the analysis of expenditure patterns.

Data and methodology

Data. Cross-sectional data utilized for comparison over time are from the BLS CE Survey Interview tapes for 1980-81 and 1989-90.13 These tapes contain data on demographics, expenditures, income, taxes, selected assets, housing ownership, and public assistance for each household. The CE Survey Interview sample is a rotating panel that targets 5,000 consumer units quarterly, with four quarters of data collected on each such unit and about 1,250 new consumer units cycled into the survey each quarter. Although some researchers use each quarter of CE Survey data as an independent sample, the study presented in this article includes only households with at least two quarters of data on expenditures.14 Household expenditures are annualized by aggregating, 15 to increase accuracy, to remove the need for seasonal adjustment, and to minimize possible methodological complications from zeros in the data, which may occur in the case of health care. To enhance the sample size, the data are pooled for each of the 2-year periods examined (1980-81 and 1989-90).

The sample includes only those households the Bureau terms "complete income reporters," with before-tax and after-tax income greater than zero, that are living independently (that is, which have total expenditures greater than zero and positive expenditures for both food and housing). The focus group of elderly households includes those with a reference person or spouse aged 65 or older. To create the comparison group of nonelderly households, the sample excludes those households with a resident elderly person who is not the reference person or spouse. Thus, the comparison group of nonelderly households includes only households with no older persons in residence.

The variables used for each household are total expenditures; expenditures for food, housing, ¹⁷ and health care; ¹⁸ household income and taxes; socioeconomic and demographic characteristics; and participation in public assistance programs, including cash assistance (AFDC and/or SSI) and food stamps. Data on income and expenditures for 1980–81 are adjusted for inflation to 1990 levels, using the Consumer Price Index (CPI) to make all data compatible in constant 1990 dollars. ¹⁹ This permits comparisons over time in terms of the general price level and allows discussion of the findings in real or inflation-adjusted values.

Table 1 presents economic and demographic characteristics of the eight sample groups defined: elderly (aged 65 or older) and nonelderly households receiving or not receiving cash financial assistance for both periods. We classify households receiving assistance on the basis of cash rather than inkind assistance, such as food stamps, because a household

	Households not receiving financial assistance ¹					Households receiving financial assistance ¹				
Characteristics	Nonelderly Eld			rly	Characteristics	Nonelderly		Elderly		
	1980-81	1989-90	1980-81	1989-90	i	1980-81	1989-90	1980-81	1989-90	
Sample size (N)	3,837	4,279	989	1,234	Sample size (N)	306	315	125	96	
person	39	40	73	73	person	40	39	73	75	
lean family size	2.9	2.8	1.8	1.8	Mean family size	3.6	3.6	1.8	1.8	
Dollar amounts					Dollar amounts				ļ	
toon income.		1			Mean income:	l			Ì	
Mean income: Before taxes	\$30,427	\$37,263	\$15,537	\$20,438	Before taxes	\$14,137	\$15,147	\$6,856	\$9,685	
After taxes	26,520	33,519	15,071	19,432	After taxes	13,451	14,613	6,832	9,578	
Total expenditures	25,883	31,468	15,071	19,432	Total expenditures	13,579	15,879	7,542	9,242	
Mean financial assets	5,679	10,231	10,781	22,657	Mean financial assets	1,410	2,652	730	4,589	
Percentages					Percentages				ļ	
Receiving food stamps	4	3	4	3	Receiving food stamps	73	69	50	39	
Currently working ²	94	93	25	21	Currently working ²	52	49	9	9	
Income distribution:3					Income distribution:3					
Below 125 percent of		1			Below 125 percent of					
poverty level 125–200 percent of	15	12	36	20	poverty level 125–200 percent of	70	70	82	71	
poverty level	16	13	25	26	poverty level	13	13	59	56	
Above 200 percent of					Above 200 percent of				ì	
poverty level	69	75	39	54	poverty level	17	17	15	23	
Family type:4					Family type:4			:		
Married couple	66	61	49	50	Married couple	35	30	26	21	
Single person	22	23	41	39	Single person	13	13	59	56	
Other families	69	16	10	11	Other families	52	57	15	23	
Race:					Race:					
Nonwhite	12	12	9	9	Nonwhite	42	37	34	29	
White	88	88	91	91	White	58	63	66	71	
Education:					Education:			25		
High school not completed .	20	14	59	45	High school not completed	57	42	89	71 26	
High school graduate	58	57	32	43	High school graduate	40	52	8	26	
College graduate	22	39	9	12	College graduate	3	6	3	3	
Housing status:					Housing status:			46	F.4	
Homeowner	64	64	74	78	Homeowner	29 71	27 73	46 54	54 46	
Renter or other	36	36	26	22	Henrie of Other	1 "	,,	J-4	1 70	

¹Financial assistance includes Aid to Families with Dependent Children (AFDC) and Supplemental Security Income (ssi).

SOURCE: Data derived from Bureau of Labor Statistics Consumer Expenditure Survey, Interview tapes, 1980-81, 1989, and 1990.

that receives in-kind assistance may get only a small portion of its income from that source, whereas cash assistance generally represents the primary source of income for eligible recipients. Our category of households receiving assistance is thus developed to represent households that are dependent on government transfers for a substantial portion of their income. Cash financial assistance is determined by receipt of sst or AFDC. A comparison of households that received cash financial assistance with those that did not reveals the ex-

pected differences in their sociodemographic characteristics: recipients of financial assistance have fewer financial assets and less income and are more frequently nonwhite, less educated, and less likely to be homeowners. Among the elderly, recipients are more likely to be single, and among the nonelderly, they are mostly single-parent households. These demographic factors are determined somewhat by the eligibility criteria for assistance.

Income distribution is determined using the 1990 Federal

² The working status of a household was determined by the employment status of the reference person or his or her spouse.

³ The poverty level is based on household size for each consumer unit. The two-person poverty level in 1990 was \$7,829 for nonelderly households and \$7,237 for elderly households.

⁴ Married couples include those with and those without children. Single persons include only those without children. Other families include primarily single persons with children present (for example, parents, grandparents, or foster parents), but also any other household combination not included in the married-couple or single-person category.

poverty level for the elderly and nonelderly, adjusted for family size. The poverty level was defined under the Johnson administration in the early 1960s for the purpose of establishing eligibility for Federal transfer programs. For households of the same size, the poverty level is lower for the elderly than the nonelderly. The 1990 poverty level for those aged 65 and older is \$5,767 for one-person and \$7,237 for two-person households; for the nonelderly, it is \$6,257 for one-person and \$7,829 for two-person households. The three income groups defined are "poor" (less than 125 percent of the poverty level), "low income" (between 125 percent and 200 percent of the poverty level), and "higher income" (more than 200 percent of the poverty level).

Methodology. Descriptive statistics are used to compare the expenditure patterns of elderly and nonelderly households in 1980–81 with similar households in 1989–90. Mean expenditures and budget shares on necessities²² are compared across time by age group. This initial comparison answers the broad research question, What changes occurred in expenditures on necessities by elderly households, compared with nonelderly households, during the 1980s?

Next, the relationships between the dependent variables (expenditures on three categories of necessities) and the explanatory socioeconomic variables are analyzed, using a two-stage regression model. This procedure is based on the theory of consumer decisionmaking regarding expenditures. The underlying economic theory is the life cycle theory of consumption, which is also termed the permanent income theory.²³ This theory holds that rational consumers largely ignore the fluctuations of current income around what is termed permanent income, in order to maximize utility by leveling consumption over time.

Although it would be preferable to use permanent income as a variable to explain household expenditures on necessities, permanent income is not observable. However, total expenditures are a desirable surrogate for permanent income, because they do not reflect the year-to-year fluctuations in current income and are highly correlated with permanent income.²⁴ Because total expenditures (the explanatory variable) and expenditures on certain categories (the dependent variables) are simultaneously determined, ordinary least squares estimates could produce biased coefficients.25 To avoid such bias, we use a two-stage model. The first stage of the twostage procedure provides an estimated permanent income variable, which is then used in the second stage of the procedure. This proxy for permanent income is developed using total expenditures as the dependent variable. The first-stage independent variables are (1) the identifying variables of current income, financial assets, and education, and (2) the other demographic and economic variables, which are included in the second stage. The first-stage variables were selected on

the basis of their theoretical and empirical correlation with permanent income.

The second-stage variables used to explain the three expenditure categories of necessities (food, housing, and health care) are the first-stage estimates of permanent income, age of the reference person, family size, race, housing tenure, food stamps, and financial assistance. The second-stage regression equation for elderly and nonelderly households for the three expenditure categories is

$$H_{ij} = \alpha + \beta_{ij}I_i + \beta_{2j}Age_i + \beta_{3j}Size_i + \beta_{4j}Race_i + \beta_{5j}Home_i + \beta_{6j}FS_i + \beta_{7j}FA_i + \beta_{8j}FA*COMPARE_i + \beta_{9j}COMPARE_i + u_{ij}$$

where

 $H_{ij} = \ln(\text{annual expenditure of household } i \text{ on category } j$, with j = 1, 2, 3),

 $I_i = \ln(\text{stage-1 estimate of permanent income of household } i),$

Age, = age of reference person of household i,

Size = family size of household i,

Race = 1 if reference person i is white, 0 if nonwhite,

Home, = 1 if household i owns its home, 0 if it rents,

 $FS_i = 1$ if household *i* receives food stamps, 0 otherwise,

 $FA_i = 1$ if household *i* receives financial assistance, 0 otherwise.

 $FA*COMPARE_i = 1$ if household *i* receives financial assistance and the period is 1989-90, 0 otherwise,

 $COMPARE_i = 1$ if household i is in 1989-90 period, 0 otherwise, and

 u_{ii} = disturbance term.

The natural logarithms of expenditures and of permanent income are used to improve the fit.

The COMPARE variable indicates the period in which the sample household was selected, and the FA*COMPARE variable indicates whether a household received financial assistance in 1989–90. Therefore, the β_{9j} coefficient measures change in household spending on necessity category j over the decade of the 1980s. The β_{8j} coefficient shows whether households that received financial assistance had different spending patterns on necessity category j in 1989–90 than in 1980–81.

Findings

Table 2 presents mean household expenditures and budget shares on the necessity categories of food, housing, and health care, as well as on other (discretionary) spending, by age group and financial assistance status, for the two periods, 1980–81 and 1989–90. The percent change in income, expenditures, and budget shares from one period to the other is also shown. Because real income, in constant 1990 dollars,

Mean income, total expenditures, and means and shares of expenditures of nonelderly and elderly households, by expenditure category and financial assistance status (in constant 1990 dollars)

Expenditure category	Househ	Households not receiving financial assistance ¹						Households receiving financial assistance ¹					
	ı	Nonelderly			Elderly		Expenditure category	Nonelderly			Elderly		
	1980-81	1989-90	Percent change	1980-81	1989-90	Percent change	Calegory	1980-81	19 89-9 0	Percent change	1980-81	1989-90	Percent change
Mean income:							Mean income:						
Before taxes	\$30,427	\$37,263	22.5	\$15,537	\$20,438	31.5	Before taxes	\$14,137	\$15,147	7.1	\$6,856	\$9,685	41.3
After taxes	26,520	33,519	26.4	15,071	19,432	28.9	After taxes	13,451	14,613	8.6	6,832	9,578	40.2
Total							Total						
expenditures	25,883	31,468	21.6	15,071	19,432	28.9	expenditures	13,579	15,879	16.9	7,542	9,242	22.5
Mean dollar amount:		Į.					Mean dollar amount:						
Food	4,870	4.800	-1.4	3,160	3,391	7.3	Food	3,675	3,723	1.3	2,355	2,300	-2.3
Housing		9,528	33.1	4,849	5,937	22.4	Housing	4,394	5,375	22.3	2,640	3,609	36.7
Health		1.236	27.6	1,548	2.190	41.5	Health		474	48.7	544	762	40.0
Other		15,904	23.4	5,514	7,914	43.5	Other		6,299	21.4	2,003	2,571	28.4
Share of budget (percentage):					1		Share of budget (percentage):]				
Food	18.8	15.3	-18.6	21.0	17.5	-16.7	Food	27.1	23.5	-13.3	31.2	24.9	-20.2
Housing		30.3	9.4	32.2	30.6	-5.0	Housing		33.9	4.6	35.0	39.0	11.4
Health		3.9	5.4	10.3	11.3	9.7	Health		3.0	30.4	7.2	8.2	13.9
Other		50.5	1.4	36.6	40.7	11.2	Other		39.7	3.9	26.6	27.8	4.5

¹Financial assistance includes Aid to Families with Dependent Children (AFDC) and Supplemental Security Income (ssi).

Source: Data derived from Bureau of Labor Statistics Consumer Expenditure Survey, Interview tapes, 1980–81, 1989, and 1990.

increased substantially for all household groups except nonelderly recipients of financial assistance,26 it is expected that mean expenditures on each category of necessity would increase. We also expect that a portion of the increase in real income would be allocated as discretionary spending to the category of "other," which we define as total expenditures less expenditures on food, housing, and medical care. These results are generally found, with the exceptions of decreased expenditures on food for both elderly recipients of assistance and nonelderly persons who do not receive assistance. The decrease in constant-dollar expenditures on food by these two groups may be explained by the fact that food prices did not increase as rapidly as the overall cri did during the decade of the 1980s (35.5 percent, compared with 43.8 percent).27 The less rapid rise in food prices is clearly reflected in the change in expenditures for food as a share of total expenditures over the 1980s. The share of the household budget spent on food decreased substantially for all four groups analyzed.

Constant-dollar expenditures on health care increased over the decade for each of the groups, indicating more health care purchased or the high inflation of health care (96.4 percent, compared with 43.8 percent for the overall cri). Not surprisingly, the budget share spent on health care by the elderly is substantially higher than that spent by the nonelderly, in both periods and for both recipients of financial assistance and those who did not receive assistance.

For both periods examined and for recipients and non-

recipients of financial assistance, the elderly spent a slightly larger share of total expenditures on housing than the nonelderly did. Elderly recipients of assistance, the group with the lowest income, spent the largest budget share of any group on housing (35 percent in 1980–81 and 39 percent in 1989–90).

The data indicate that all household groups were better off overall in 1989-90 than they were in 1980-81, as measured by the amount and share of total expenditures on non-necessities (other goods and services). This is consistent with the increases in real income indicated in table 1 and shows that elderly households gained relative to nonelderly households over the decade, apparently because of their decreased shares spent on food. However, smaller gains were made by recipients of financial assistance than by those who did not receive such assistance.

Household savings behavior may be perceived as another measure of household well-being, because increases in savings indicate increased discretionary income that the household has allocated to savings. We define savings as after-tax income minus total expenditures. This measure of savings indicates that, on average, those elderly who did not receive financial aid were spending more than their income (or dissaving) in both 1980–81 and 1989–90. Elderly recipients of cash aid were dissavers in 1980–81, but not in 1989–90. (See table 1.) This contrasts with the picture for the nonelderly: those who did not receive financial assistance

were net savers in both periods, and those who did receive assistance were dissavers in both periods.

By 1989-90, the share of elderly financial aid recipients below 125 percent of the poverty level declined from 82 percent to 71 percent, making it comparable to the share of the nonelderly recipients (70 percent) below 125 percent of the poverty level. (See table 1.) By the same measure, the percentage of elderly households not receiving cash assistance that were below 125 percent of the poverty level declined from 36 percent to 20 percent over the decade, while for nonelderly households that did not receive assistance, the decline was from 15 percent to 12 percent.

Table 3 presents the second-stage regression results for the three categories of expenditures on necessities. The models reflect changes over the decade of the 1980s for all three categories and both age groups, as shown by the significant COMPARE parameters. However, the sign varies: the parameter is negative for food for both age groups and for nonelderly health

care, and positive for housing for both age groups and for elderly health care.

Because both the permanent income variable and the dependent variable are in logarithmic form, the permanent income parameter is an estimate of the income elasticity of the expenditure category in question. This estimate indicates the percent change in spending on a particular good caused by a 1-percent change in income. Income-elastic expenditures (permanent income parameter greater than 1) are expenditures that increase with income and for which the share of income spent on the category in question increases as income increases. In contrast, income-inelastic expenditures (permanent income parameter less than 1) are expenditures for which the share of income spent on the item in question decreases as income increases, even though expenditures on the item increase with income.

The permanent income parameter is highly significant and positive, but less than 1, for the purchase of food for both age groups. This is consistent with the economic theory of expenditures on necessities, which are perceived to be normal goods (spending on the good increases as income increases), but income inelastic. However, the permanent income parameters for housing for both elderly and nonelderly households

Table 3. Regression results on expenditures for necessities by nonelderly and elderly households, 1980-81 and 1989-90

Dependent variables	In(food	1)	in(hou	sing)	in(health care)					
Nonelderly households:										
Constant	12.224	(.137)	1-1.986	(.171)	¹-11.468	(.744)				
In(permanent income)	1.552	(.015)	11.095	(.018)	11.544	(.080)				
Age (reference)	1.006	(.000)	1004	(.000)	1.031	(.002)				
Family size	¹ .112	(.003)	1034	(.004)	1.058	(.017)				
Race (reference)	².026	(.012)	1082	(.015)	1.451	(.063)				
Housing status	.001	(.011)	1035	(.013)	1.231	(.057)				
Food stamps	004	(.020)	1.146	(.024)	1389	(.106)				
Financial assistance	.008	(.025)	1,200	(.031)	1,662	(.136)				
FA*COMPARE	1.076	(.030)	2079	í.037í	201	(.163)				
COMPARE	1082	(.009)	1,100	(.011)	2-,091	(.046)				
Adjusted R ²	.535		.499		.262	(,				
F value	¹ 1,117.421		967.651		1344.778					
Elderly households:										
Constant	12,468	(.279)	243	(.298)	2-1.765	(.782)				
In (permanent income)	1,595	(.027)	1,847	(.028)	1.681	(.075)				
Age (reference)	1007	(.001)	1.004	(.001)	1.021	(.003)				
Family size	¹,125	(.010)	1073	(.011)	3,049	(.028)				
Race (reference)	1.071	(.027)	.004	(.028)	1,309	(.074)				
Housing status	3.033	(.019)	1191	(.020)	1.328	(.053)				
Food stamps	.013	(.036)	.010	(.038)	044	(.100)				
Financial assistance	².083	(.041)	030	(.043)	1714	(.114)				
FA*COMPARE	.013	(.054)	.039	(.057)	.151	(151)				
COMPARE	1080	(.017)	1.060	(.018)	1340	(048)				
Adjusted R 2	.515	(·-··)	.450	(,	.253	(.010)				
F value	1289,008		1223.314		192.886					

¹ Significant at the p < .01 level.

Note: Standard errors are shown in parentheses. The sample sizes are n = 8,116 for nonelderly households and n = 2,223 for elderly households.

are much closer to 1, indicating that housing is less of a necessity than food. For medical care, the permanent income parameter for the nonelderly is substantially greater than 1, indicating that this category of expenditures is a nonnecessity; but for the elderly, it is considerably below 1, consistent with the economic definition of a necessity.

The financial assistance parameters indicate that receipt of cash assistance was not an important determinant of spending on food for the nonelderly in 1980–81 [shown by financial assistance = .008 (.025)], but it became important by the end of the decade [shown by FA*COMPARE = .076 (.030)]. For the elderly, receipt of assistance was significant and positive in both periods, indicated by a significant financial assistance parameter and a nonsignificant FA*COMPARE parameter. This reflects the fact that there was no change over the decade in the relationship between the receipt of financial assistance and spending on food.

For housing expenditures, the positive and significant financial assistance parameter for the nonelderly indicates that receiving cash assistance leads to increased spending on housing. The significant decrease in this parameter during the decade indicates that this effect weakened, but the sum of the two parameters remained positive and substantially above

² Significant at the p < .05 level.

³ Significant at the p < .10 level.

zero. For elderly households, financial assistance had no significant effect on housing expenditures, perhaps reflecting the higher level of home ownership among elderly financial aid recipients compared to nonelderly recipients. (See table 1.)

For both elderly and nonelderly households, the financial assistance parameters for health care are significant and negative, with no significant change over the 1980s. This indicates that those with financial assistance spend less on health care than those who do not receive assistance, probably a reflection of the mandated medicaid coverage for those on AFDC and for most aged, blind, or disabled recipients of sst.²⁹

The food stamp parameter is not significant for elderly households for any of the necessities or for the nonelderly for expenditures on food. This may be because in the CE Survey data base, expenditures on food indicate the value of food purchased (including that paid for with subsidized food stamps) and not the amount spent above the value of food stamps. Because food stamps can be substituted for cash and are included as income in the CE Survey data, there is no reason to expect the value of food stamps to affect only expenditures on food. The food stamps variable indicates that receipt of food stamps by the nonelderly leads to a significant increase in spending on housing, which may reflect a transfer of funds freed from spending on food. Further, the receipt of food stamps is related to a reduction in spending on health care for nonelderly households.

CONTRARY TO SOME OTHER RESEARCH, the results set forth in this

article show that, for the population in general, well-being increased over the 1980s, as measured by both real income and discretionary spending. The well-being of elderly households increased relatively more than that of nonelderly households, and the well-being of recipients of cash assistance increased relatively less than that of those who did not receive assistance. Thus, nonelderly recipients of cash assistance saw very slight real income growth during the decade, while the real income of other groups grew substantially. An increase in household real incomes and a reduction in the relative price of food are the primary reasons for the improvement in welfare noted.

In both 1980–81 and 1989–90, the receipt of financial assistance reduced out-of-pocket expenditures on health care for both age groups. This was probably caused by eligibility for medicaid being generally coincident with the receipt of sst or AFDC. Financial assistance increased food expenditures in 1989–90 for nonelderly households and in both periods for elderly households. Financial assistance allowed higher housing expenditures in both periods for nonelderly households, but had no effect on housing expenditures for the elderly.

In general, recipients of financial assistance have not improved their well-being over the 1980s as much as other households did, at least as measured by spending. However, for both elderly and nonelderly households, recipients of financial aid slightly reduced the shares of their budgets spent on necessities over the decade. This provides some indication that even those receiving financial assistance improved their well-being during the 1980s.

Footnotes

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- ¹ From 1970 to 1980, social welfare expenditures under public programs increased from 14.8 percent to 18.6 percent of gross domestic product (GDP) and from 46.5 percent to 57.2 percent of total government outlays. Then, from 1980 to 1990, the growth of social welfare expenditures flattened as a percentage of GDP, to 19.1 percent, and declined as a percentage of total government outlays, to 56.6 percent. (See Statistical Abstract of the United States: 1993, 113th edition (Bureau of the Census, 1993).)
- ² Statistical Abstract of the United States: 1994, 114th edition (Bureau of the Census, 1994).
- ³ Marilyn Moon, "Consumer Issues and the Elderly," *Journal of Consumer Affairs*, vol. 24, no. 2, 1990, pp. 235-44.
- ⁴ R. L. Clark and D. A. Sumner, "Inflation and the Real Income of the Elderly: Recent Evidence and Expectations for the Future," *The Gerontologist*, vol. 25, no. 2, 1985, pp. 146-52.
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iture survey," Monthly Labor Review, October 1986, pp. 15-17.

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- ⁹ Sheldon Danziger, Jacques van der Gaag, Eugene Smolensky, and Michael K. Taussig, "The Life-Cycle Hypothesis and the Consumption Behavior of the Elderly," *Journal of Post Keynesian Economics*, Winter 1982–83, pp. 208–27.
- ¹⁰ William Lazer and Eric H. Shaw, "How Older Americans Spend Their Money," *American Demographics*, vol. 9, no. 9, 1987, pp. 36-41.
- ¹¹ See Harrison, "Spending Patterns of Older Persons"; Marilyn Doss Ruffin, "Cutting Back on Consumption: The Experience of Older Households," *Family Economics Review*, vol. 2, no. 3, 1989, pp. 2–7; and Beth J. Soldo, "America's Elderly in the 1980's," *Population Reference Bureau*, vol. 35, no. 4 (Washington, pc, U.S. Government Printing Office, 1980).
- ¹² See Charles E. McConnel and Firooz Deljavan, "Consumption Patterns of the Retired Household," *Journal of Gerontology*, July 1983, pp. 480-90; Thomas Moehrle, "Expenditure patterns of the elderly: workers and nonworkers," *Monthly Labor Review*, May 1990, pp. 34-41; and Rose M. Rubin and Michael Nieswiadomy, "Expenditure patterns of retired and nonretired persons," *Monthly Labor Review*, April 1994, pp. 10-21.

- 13 See 1989 Consumer Expenditure Survey: Interview Survey Detailed Public Use Tape Documentation (Bureau of Labor Statistics, 1990); and 1990 Consumer Expenditure Survey: Interview Survey Detailed Public Use Tape Documentation (Bureau of Labor Statistics, 1991).
- 14 Raymond Gieseman, "The Consumer Expenditure Survey: quality control by comparative analysis," Monthly Labor Review, March 1987, pp. 8-14, uses each quarter of data. Ideally, only households with four quarters of data should be used, to preclude distortions created by unusual expenditures or no expenditures in one quarter, which occur particularly in the case of medical expenditures. However, to maintain the sample size, we elected to include households with a minimum of two quarters of data.
- 15 For those households with only two quarters of data, expenditures are doubled to annualize them, and for those with three quarters of data, expenditures are multiplied by 1-1/3. The data used are the data reported by respondents and are not seasonally adjusted.
- 16 The Bureau defines a complete income reporter as "a consumer unit that provides values for at least one of the major sources of its income, such as wages and salaries, self-employment income, and Social Security income" (Consumer Expenditures in 1990, USDL 91-607 (Bureau of Labor Statistics, 1991), p. 6). The report adds, "Even complete income reporters may not have provided a full accounting of all income from all sources" (p. 6).
- ¹⁷ The category of housing expenditures does not include payments for nursing home residents, who are not counted in the CE Survey.
- 18 Health care expenditures include household out-of-pocket payments for health goods and services and insurance premiums, but not third-party
- 19 The overall CPI for 1981 was 90.9, and for 1990 it was 130.7; see Statistical Abstract: 1993, table 756, p. 482.

- 20 Statistical Abstract: 1993.
- ²¹ See Timothy M. Smeeding, "The Economic Well Being of the Elderly-Past, Present, and Future," EBRI Issue Brief, no. 96, November 1989; and Gail R. Wilensky, "Government and the Financing of Health Care," American Economic Review, vol. 72, no. 1, 1982, pp. 202-7.
- 22 We utilize the BLS categories of food, housing, and health care as necessities, although it could be argued that some expenditures in these categories are not necessities for some households. Further, some expenditures in our residual "other" category could be considered necessities, such as certain expenditures for clothing or child care.
- ²³ See Albert Ando and Franco Modigliani, "The Life Cycle Hypothesis of Saving: Aggregate Implication and Tests," American Economic Review, March 1963, pp. 55-84; and Milton Friedman, A Theory of the Consumption Function (Princeton, NJ, Princeton University Press, 1957).
- ²⁴ See McConnel and Deljavan, "Consumption Patterns of the Retired Household," for an earlier example of this procedure.
- 25 One of the explanatory variables would be correlated with the error term. See Nissan Liviatan, "Errors in Variables and Engel Curve Analysis," Econometrica, July 1961, pp. 336-62.
- 26 Constant real income is expected for nonelderly recipients of financial assistance, as AFDC payments increase only when State legislatures raise AFDC, which rarely occurred during the 1980s. In contrast, for elderly recipients of assistance, ssi increases as Social Security increases with the CPI.
 - ²⁷ Statistical Abstract: 1993.
 - 38 Ibid.
- ²⁹ James H. Schulz, The Economics of Aging (New York, Auburn House,