

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: Studies in Income and Wealth, Volume 15

Volume Author/Editor: Conference on Research in Income and Wealth

Volume Publisher: NBER

Volume ISBN: 0-870-14170-8

Volume URL: <http://www.nber.org/books/unkn52-1>

Publication Date: 1952

Chapter Title: Income, Spending, and Saving Patterns of Consumer Units in Different Age Groups

Chapter Author: Janet A. Fisher

Chapter URL: <http://www.nber.org/chapters/c9766>

Chapter pages in book: (p. 75 - 102)

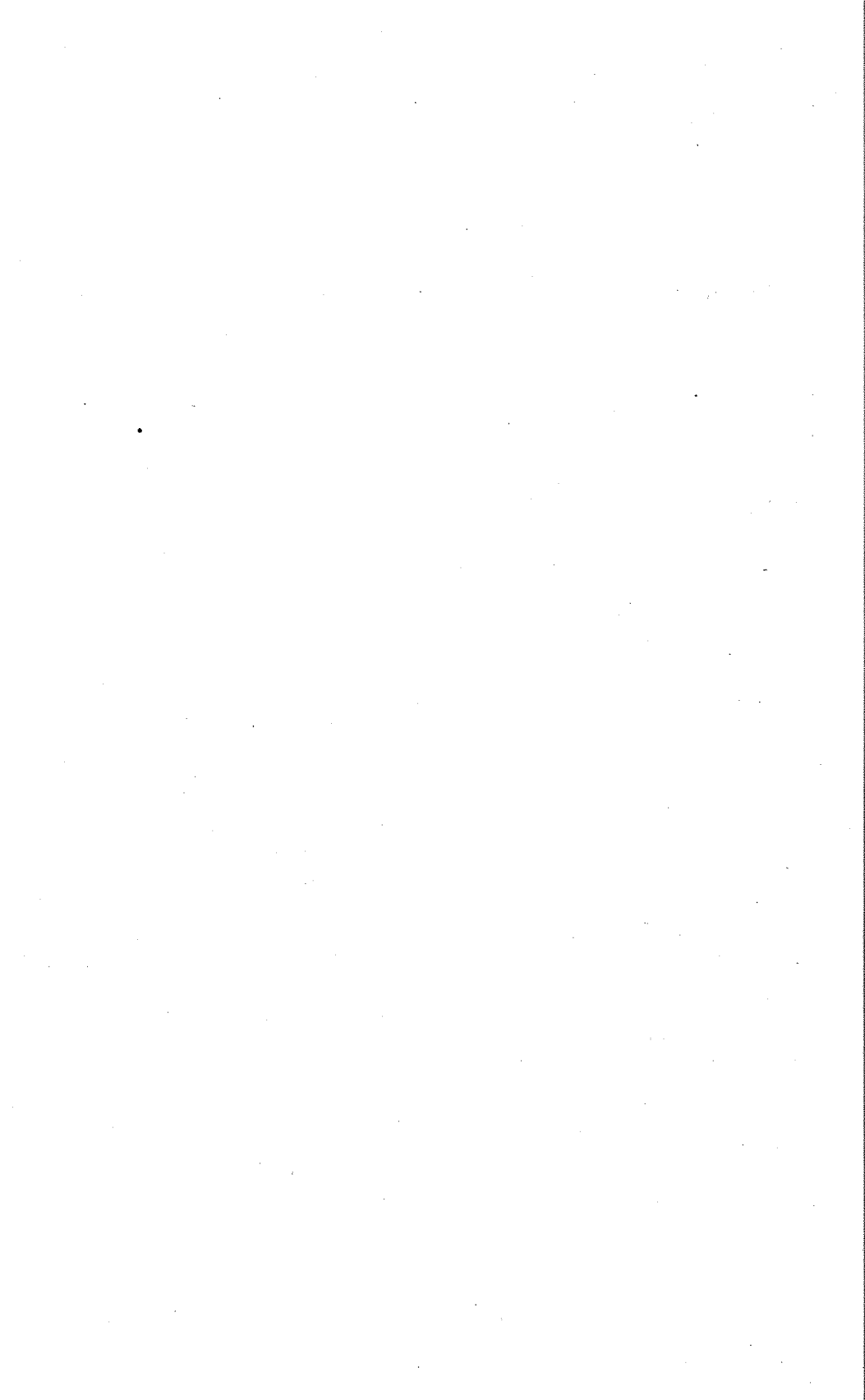
Part IV

Income, Spending, and Saving Patterns of Consumer Units in Different Age Groups

JANET A. FISHER

Madison, Wisconsin

This paper is a condensation of the author's 'The Economics of an Aging Population, A Study of the Income, Spending and Saving Patterns of Consumer Units in Different Age Groups, 1935-36, 1945 and 1946' (unpublished). The data used there were taken from the Consumer Purchases Study for 1935-36, the 1946 Liquid Assets Survey, and the 1947 Survey of Consumer Finances. For data from the Consumer Purchases Study for 1935-36, see Day Monroe, Maryland Y. Pennell, Mary Ruth Pratt, and Geraldine S. DePuy, Family Spending and Saving as Related to Age of Wife and Age and Number of Children (Department of Agriculture, Misc. Pub. 489, 1942). Data from the 1946 Liquid Assets Survey and the 1947, 1948, and 1949 Surveys of Consumer Finances were made available by the Survey Research Center of the University of Michigan which conducted these surveys for the Board of Governors of the Federal Reserve System.



THE MEDIAN AGE OF THIS COUNTRY'S POPULATION almost doubled during the last century, reaching 30.0 in 1947. It is expected to continue increasing during the next half century, possibly reaching 37.4 years.¹ Whether the rise will be this rapid is somewhat controversial because demographic developments during the 1940's are variously interpreted. It is argued on the one hand that recent changes in fertility and mortality rates reflect the beginning of new trends in population growth which would make for a somewhat smaller increase in median age; on the other hand, that recent tendencies in fertility rates should be considered a cyclical fluctuation rather than an indication of a new trend, and the *trend* of declining fertility rates along with declining mortality rates will combine to raise the median age and the proportion of the elderly rapidly.² In either case, the number and proportion of persons over 65 are expected to continue to rise. Even if this trend does not continue, there are important reasons for studying age differences in economic resources and behavior. These include questions of current social policy with respect to employment, social security, pensions, and taxation. In addition, there are questions of economic theory concerning the concentration of income and other economic resources and the relations between savings and income that may be illuminated in a study of consumers in different age groups. In other words, a study of consumers who are in different stages of the family life cycle should increase our knowledge of consumer behavior as a whole.

The central question of this study is whether changes in the age composition of the population influence the national income and the proportion saved. We can approach the question by analyzing the financial position and economic behavior of consumer units in different age groups. More specifically, for different age groups we shall examine the distribution of income and accumulated savings, and the patterns of current expenditure

¹ 15th Census 1933, II, *General Report* No. 1, Table V, p. 568; and P. K. Whelpton, *Forecasts of the Population of the United States, 1945-1975* (Bureau of the Census, 1947), Table I, p. 73, and Appendix Table D, p. 109.

² Joseph S. Davis, *The Population Upsurge in the United States* (Food Research Institute, Stanford University, 1948); also, 'Scientists at Odds over U. S. Population of Future', *Ann Arbor News*, February 13, 1950. The latter, a dispatch from *Science Service*, quotes Philip Hauser, then Acting Director of the Bureau of the Census, in opposition to Davis' views and in support of Whelpton's forecasts.

and saving out of income. From this approach, by use of cross-section data, we may develop hypotheses about the 'effects' of changing age composition. Yet the economic correlates of age may not be constant. They must be continually reexamined as the age distribution of the population changes.

The extent to which the major relationships among age groups are repeated in the three nationwide surveys of consumer income, expenditures, and saving is impressive. Because of this repetition and space limitations, only data from the 1947 Survey of Consumer Finances covering finances for 1946 are presented, except when important differences should be noted or better evidence has since become available.

The basic unit of analysis in the annual Surveys of Consumer Finances is the *spending unit*, defined as a person or group of persons who live together, are related by blood, marriage, or adoption, and who pool their incomes for the major part of their expenditures. Somewhat less than half of all spending units consist of husbands and wives with children. There is also a substantial proportion of couples without children as well as single individuals and some broken families. The relatively broad age group classifications of spending unit heads are those established on the interview schedule. The age of other spending unit members is not reported.

The nationwide surveys from which these data were taken were designed to study general and specific questions about consumers' economic status and behavior. Although they provide a useful basis to begin the study of age differences, they have certain shortcomings. For example, since the age classifications are relatively broad and fixed, individual spending units cannot be shifted into different classifications to determine at what ages income status or buying behavior changes. Information on the ages of persons other than the head of the spending unit is not available. The samples were not designed to yield as many cases in each age group as would be desirable, especially in age groups that are relatively small in the population. And the definitions of income and saving do not permit use of national balance sheet concepts as well as household concepts in the analysis.³

Much of the following analysis is centered upon differences between

* For detailed description of the data including survey objectives, methodology, and definitions see 'The Economics of an Aging Population', Chapter 2, pp. 21-52, and 'Methods of the Survey of Consumer Finances', *Federal Reserve Bulletin*, July 1950, pp. 795-809.

For estimates of statistically significant differences upon which the analysis is based, see George Katona and Janet A. Fisher, 'Postwar Changes in the Income of Identical Consumer Units', *Studies in Income and Wealth, Volume Thirteen* (1951), Appendix Table 8, pp. 118-9.

spending units with heads in the youngest and oldest adult age groups because while the total population may increase approximately 17 percent, the number 20 to 30 years old may decline slightly during the next half century and the number 65 years and older may more than double. The number between 30 and 65 years may also increase somewhat, but much less than those 65 years and older. What should be noted with respect to the middle age groups is the expected upward shift in their age composition.⁴

The term 'young' (or 'young people') will be used for the group 18-24 years except when 18-34 years are specified. 'Old' (or 'old people') will be used for spending units in the age of head group 65 years and older. 'Middle aged' will be used for spending units in the 25-64 or 35-64 age of head groups. The upper and lower middle age groups will be separated in discussing data that reveal differences for subgroups within the middle age group.

A ECONOMIC CHARACTERISTICS OF THE FAMILY LIFE CYCLE

Speculation about the differences in economic behavior of consumers in different age groups may provide useful hypotheses for analyzing quantitative material. Therefore, we shall trace the life cycle of a hypothetical family, ignoring, for the moment, the ways in which income, spending, and savings patterns of persons within each age group may vary because of differences in the socio-economic characteristics that cut across all age groups.⁵

⁴ *Forecasts of the Population of the United States, 1945-1975*, Table I, p. 73, and Appendix Table D, p. 109.

⁵ Analyses of various aspects of the family life cycle appear in the following publications:

- a) Louis I. Dublin and Alfred J. Lotka, *The Money Value of a Man* (Ronald Press, 1946), pp. 74-5.
- b) Robert S. and Helen M. Lynd, *Middletown* (Harcourt Brace, 1929), pp. 30-6.
- c) Day Monroe, *Chicago Families, A Study of Unpublished Census Data* (University of Chicago Press, 1932), pp. 18, 146-9, 154-77.
- d) H. Peat, 'Economic Welfare and Family Responsibility', *Economica*, Nov. 1926, pp. 269-84.
- e) B. Seebohm Rountree, ed., *Poverty, A Study of Town Life* (2d ed., London, 1922), pp. 136-7.
- f) Edgar Sydenstricker, Willford I. King, and Dorothy Wiehl. *The Income Life Cycle in the Life of the Wage Earner*, Reprint No. 947 from the Public Health Reports, August 22, 1924, pp. 2133-40 (p. 6 of reprint).
- g) Family Income and Expenditures: Middle Atlantic and New England Regions, Part I, Family Income (Farm Series) (Department of Agriculture, *Miscellaneous Publication 383*, 1940), pp. 65-7.

The family life cycle may be defined as the period from marriage through the death of both husband and wife. The shape of the income curve for this cycle is a function of the income curve of the head of the family plus the incomes of other members who work during any particular portion of the family's life. If only the husband works throughout the family life cycle, the family income curve will be identical with the husband's earnings plus whatever may be received from investing accumulated savings. If, at the time of marriage, both husband and wife work, and before the birth of the first child the wife leaves her job, the family income will fall to the current level of the husband's earnings. Some years later family income may rise through the addition of the earnings of grown children. Children may leave the parental unit when the father's earnings are falling, thereby accentuating the decline in family income that accompanies old age. Income may stabilize at a low level during old age, particularly if the head of the family retires and a pension is the sole source of income.

Family expenditures probably follow a somewhat different life cycle pattern. The pattern of total expenditures is essentially a combination of two distinct patterns that can be differentiated along functional lines: the pattern of daily outlays for food, clothing, and household expenses, and the pattern of discrete expenditures for furniture, automobiles, and other durable goods. To the latter group belong also other relatively large outlays at the time of marriage, birth of children, serious illness, and death. The pattern of continuous expenditures probably follows rather closely that of family income. That is, continuous expenditures increase as the family increases and the children grow older, and decline as children leave the parental family unit. These patterns of expenditures and income probably differ more in the rates of change rather than in their direction. The pattern of large discrete outlays, on the other hand, has no inherent relation to income, although in some cases the timing of marriage and childbirth may be affected by income. Also, serious illness is more likely to occur as age advances.

By subtracting the family life cycle curve for total expenditures from that for total income, we could obtain the family life cycle pattern for savings. The patterns described above suggest low saving or dissaving with marriage and the birth of children. If, then, income increases more rapidly than expenditures, a period of relatively high saving will accompany middle age, and if income falls more rapidly than expenditures, low saving or dissaving will characterize old age. However, if income falls less rapidly than expenditures or if it continues to rise, high saving will characterize old age. Probably both situations occur, but which, if either, predominates is the crucial question.

B INCOME

The curve of average income rises from a low level for the youngest age group to a high point during middle age, then falls again to a level equal to that for the youngest group (Table 1).⁶ The point (or points) at which average income ceases to rise and begins to fall is somewhat difficult to determine from the 1946 data. Information from both the 1948 and 1949 Surveys of Consumer Finances, in which the next to oldest age group was split, shows a decline in income from the 45-54 to the 55-64 age group.

Table 1

Percentage Distributions of Spending Units and Incomes, and Income Mean Ratios, by Age of Head, 1946

Age of Head (years)	Spending Unit Population	Aggregate Income	Income Mean Ratio*
18-24	9	5	57
25-34	22	21	95
35-44	24	28	118
45-64	32	38	116
65 and over	11	6	57
Not ascertained	2	2	
All ages	100	100	100
Number of cases	3,058	3,058	3,058

* The 'mean ratio' was derived by dividing the percentage of total income received by spending units in a particular age group by the percentage of the total spending unit population in that age group. If the mean income for all age groups were given, the mean for each age group could be determined by multiplying the mean for the total population by the mean ratio for each age group. Mean figures are not given because of the nature of the data derived from comparatively small sample surveys. For comment on this point, see '1948 Survey of Consumer Finances, Part I. Expenditures for Durable Goods, Appendix, Methods of the Survey of Consumer Finances', *Federal Reserve Bulletin*, June 1948, p. 645.

The shape of income size distributions for different age groups modifies the impression given by average incomes. Most striking in this respect is the contrast between distributions for the youngest and oldest groups whose average incomes were identical in the Survey estimates. Although about the same proportion of units in each of the extreme age groups had incomes below \$2,000 in 1946, most of such units in the 18-24 group received \$1,000-1,999 and most of such units headed by persons 65 and

⁶ In the Survey, income was defined to include total net earnings from employment, profits and losses from unincorporated businesses, net farm receipts, interest, dividends, rents and royalties as well as certain transfer payments such as unemployment compensation, pensions, retirement pay, and alimony. Nonmoney income, capital gains and losses were not included. No deductions for taxes were made in the data here presented. See 'Survey of Consumer Finances, Part II. Consumer Incomes and Liquid Asset Holdings', *Federal Reserve Bulletin*, July 1947, p. 790.

Table 2

Percentage Distribution of Spending Units, by Age of Head and Income Size, 1946

Income	Age of Head of Spending Unit (years)					All Ages
	18-24	25-34	35-44	45-64	65 & over	
Under \$1,000	27	9	10	14	49	17
1,000-1,999	44	21	19	21	23	23
2,000-2,999	20	34	27	23	11	25
3,000-3,999	5	19	19	20	7	17
4,000-4,999	3	8	12	8	4	8
5,000-7,499	1	7	7	6	2	5
7,500 & over	..	1	5	6	2	4
Not ascertained	*	1	1	2	2	1
Total	100	100	100	100	100	100
Number of cases†	250	656	737	1,033	328	3,058

* Less than 0.5 percent.

† The total for 'All Ages' includes some spending units for which the age of the head was not ascertained.

older received less than \$1,000 (Table 2). Contrariwise, the distribution of the proportion of units in these groups whose incomes were above \$2,000 shows more of the oldest than of the youngest in the higher brackets. The youngest group is much more homogeneous with respect to income than the oldest.

Table 3

Income Concentration by Age of Head of Spending Unit
Cumulative Percentage of Age-group Income Received by Each Tenth of Age-group Income Receivers, 1948

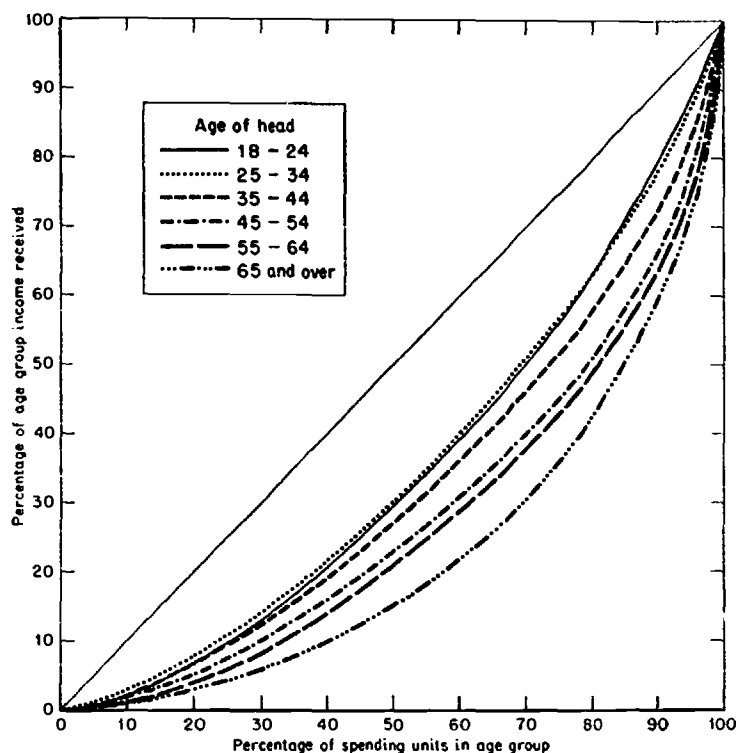
INCOME DECILE	AGE OF HEAD OF SPENDING UNIT (YEARS)						All Ages
	18-24	25-34	35-44	45-54	55-64	65 & over	
Highest	21	22	28	34	37	41	32
Second	37	37	42	49	51	57	46
Third	50	49	54	60	63	70	58
Fourth	61	60	64	69	71	78	68
Fifth	70	70	73	77	79	85	77
Sixth	79	78	81	84	86	90	84
Seventh	87	86	88	90	92	94	90
Eighth	93	92	93	95	96	97	95
Ninth	98	97	98	98	99	99	99
Lowest	100	100	100	100	100	100	100
Number of cases*	343	717	793	739	518	388	3,562

These data were available for 1948 only. However, as the income size distributions by age were similar in 1946 and 1948, it was felt that the data from either year are equally useful in illustrating comparative concentration in different age groups. For the income size distributions of spending units in different age groups in 1948 see '1949 Survey of Consumer Finances, Part III. Distribution of Consumer Income in 1948', *Federal Reserve Bulletin*, July 1949, Table 13, p. 792.

* See Table 2, note †.

Chart 1

Lorenz Curves of 1948 Income for Different Age Groups



Source: Table 3.

A marked upward shift in the distribution by size of income takes place from the youngest group to the 25-34 age of head group and continues through the next older age group. Something of a downward shift begins in the years between 45 and 64, becoming more pronounced in the oldest age of head group. Yet as noted above, although the proportion of very low income units is highest among those 65 and older, some units tend to receive relatively high incomes during both upper middle and at least some part of old age.

A still more striking picture of this tendency of incomes to diverge as age increases is illustrated by the Lorenz curves for each age group (Table 3 and Chart 1). Except for the two youngest age groups, which are almost identical, these show a systematic increase in inequality from the youngest through the oldest groups, although differences between contiguous age groups do not in *all* instances prove statistically significant in the Survey data. This relation between the degree of income concentration and age

is one of the most interesting and perhaps important findings of the study. It suggests that, other things being equal, the aging of a population over a long period may be associated with substantial changes in income structure. As noted below, similar and probably greater differences may be found in the concentration of various types of assets and age. These, in all probability, are related to the differences in income concentration. Further research into the questions of income source by age should yield some interesting results on the interrelationships between the concentration of asset holdings, assets as a source of income, and income concentration.

C LIQUID ASSET HOLDINGS

Average holdings of liquid assets do not vary with age in exactly the same manner as do average incomes.⁷ Incomes depend primarily upon current earning power, while liquid assets reflect also past earning power, the period during which spending units could accumulate their savings, and their decisions about what to do with such savings. Like average income, the average size of liquid assets increases with age from the youngest age group through the 35-44 group. Unlike income, the curve of average liquid assets continues to rise throughout middle age and declines only during old age. However, the decline is moderate (Table 4).

Table 4

Mean Ratio of Liquid Asset Holdings of Spending Units in Different Age Groups, Early 1947

Age of Head (years)	Mean Ratio of Liquid Asset Holdings*
18-24	23
25-34	60
35-44	100
45-64	125
65 and over	111
Number of cases	3,058

* The 'mean ratio' of liquid asset holdings was computed in the same way as the 'mean ratio' for income; see Table 1.

Again, size distributions reveal information that might not be expected from examination of averages alone. Although the youngest and oldest age groups differ markedly in the average size of their liquid asset holdings, both had the same proportion of zero holders in 1946 — the highest for all

⁷ Liquid assets are generally defined to include bank accounts, United States government bonds, and currency. Currency holdings are not covered in the Survey data because of difficulties of eliciting reliable information from respondents. Liquid asset size was measured as of the interview date.

age groups. The larger average holdings of spending units in the age group 65 and older can be accounted for in the relatively large holdings of those units *with* such assets. One-fifth of the oldest and only about one-twentieth of the youngest held more than \$2,000 in liquid assets (Table 5). As in the case of income, the size distribution of liquid assets shifts upward from the 18-24 age of head group through the age group 35-44. Unlike income, it does not show any tendency to shift downward in the 45-64 age of head group; the downward shift comes in the oldest group. Like income, however, the concentration of liquid asset holdings is highest for spending units in the oldest, and lowest for those in the youngest age group.

Table 5

Percentage Distribution of Spending Units, by Age of Head and Liquid Asset Holdings, Early 1947

Liquid Asset Holdings	Age of Head of Spending Unit (years)					
	18-24	25-34	35-44	45-64	65 & over	All Ages
Zero	32	24	23	20	32	24
\$1- 499	41	33	23	22	22	26
500-1,999	22	27	29	26	22	28
2,000-4,999	4	11	15	16	11	13
5,000 and over	..	3	7	12	9	7
Not ascertained	1	2	3	4	4	2
Total	100	100	100	100	100	100
Number of cases*	250	656	737	1,033	328	3,058

Source: *Federal Reserve Bulletin*, July 1947, *loc. cit.*, Table 11, p. 800.

* See Table 2, note †.

Both the similarities and differences in the distributions of income and liquid asset holdings among age groups suggest questions about the inter-relationships of income and assets in each age group. For example, are the many old people with low incomes relatively well off financially because of their accumulated assets or have they already been forced to live off their liquid resources? Our findings tend to support the latter view. In fact, for those with incomes of less than \$1,000, age groups differ little in the proportions of units with no liquid assets (Table 6). (Because of the small number of sample cases involved, the relatively high percentage of zero liquid asset holders in the 35-44 age group is not significantly different from the percentage for any other age group.)

Despite this first observation about the distribution of liquid assets among age groups in the lowest income bracket, some differences among them should be noted. The proportion of holders with less than \$500 was highest in the lowest age group and considerably smaller in the oldest, although the decline with increasing age does not seem to be systematic. In contrast, the proportion with more than \$500 in assets increases with

Table 6

Percentage Distribution of Spending Units, by Age of Head and Liquid Asset Holdings, within Income Groups, Early 1947^a

Liquid Asset Holdings	Age of Head of Spending Unit (years)				All Ages
	18-34 ^b	35-44	45-64	65 & over	
1946 INCOME: UNDER \$1,000					
Zero	51	60	51	47	51
\$1- 499	38	17	29	23	27
500-1,999	10	17	11	20	15
2,000-4,999	1	5	8	7	5
5,000 and over	..	1	1	3	2
Total	100	100	100	100	100
Number of cases ^c	109	58	123	150	442
1946 INCOME: \$1,000-2,999 ^b					
Zero	29	30	23	20	27
\$1- 499	38	26	28	26	31
500-1,999	27	32	32	30	30
2,000-4,999	6	10	12	13	9
5,000 and over	^d	2	5	11	3
Total	100	100	100	100	100
Number of cases ^c	512	306	409	110	1,365
1946 INCOME: \$3,000 AND OVER ^b					
Zero	10	6	6	4	7
\$1- 499	27	22	14	16	20
500-1,999	35	33	30	22	31
2,000-4,999	19	25	27	29	25
5,000 and over	9	14	23	29	17
Total	100	100	100	100	100
Number of cases ^c	280	365	486	62	1,217

^a In these data the 'Not ascertained' cases were assigned amounts equal to the holdings reported by units in similar income, occupation, and age groups.

^b The combinations of \$1,000 income brackets above the 'under \$1,000 income' bracket and the combination of the two youngest age groups were determined by the limited number of cases in various age and income cells rather than by considerations of the age and income classifications that would be most useful for purposes of analysis.

^c See Table 2, note †.

^d Less than 0.5 percent.

age in a fairly systematic fashion. In each higher income bracket the proportions of both zero and small holders, \$1-499, tend to decline, and the proportion of large holders, \$500 and over, to increase with age. Of course some of these relationships might well be modified by finer income classifications. Tentatively we may conclude that the tendency for the concentration of economic resources represented by income and liquid assets to increase with age is further confirmed when we examine their joint distribution.

From the viewpoint of current and future policies concerned with the

economic status of consumers in different age groups, as well as the relation of the economics of age to questions of spending and saving, some of the most important relationships are found in this phase of the analysis. For example, almost half of all the older people with incomes below \$1,000 did not hold any liquid assets. Somewhat more of the units in some of the other age groups and the same income bracket may not have held any liquid assets although the differences are not statistically significant. Nevertheless, it should be remembered that the proportion of consumer units in each of these other age groups with incomes under \$1,000 was substantially below the proportion of units in the age of head group 65 and older (see Table 2). Thus almost half of the units in the oldest age of head group had less than \$1,000 income and of these, almost half had no liquid assets. In other words, close to a quarter of the spending units in the age of head group 65 and older had low incomes and no liquid assets. In contrast, in the 18-34 age group only about a tenth had incomes under \$1,000 in 1946 and no assets at the end of *that year*. In each of the other age groups the proportion with incomes below \$1,000 and no assets was still smaller than that for spending units in the youngest age group.

The interrelationships among liquid asset holdings, annual income, and age will be better understood when data on past income and other aspects of consumers' financial histories become available. Then we shall be able to learn something about such questions as: What proportion of old people with low incomes were relatively low in the income scale throughout their lives and what proportion received relatively high incomes during some preceding period? To what extent are the current asset positions of these old people related to previous family circumstances such as support of other old people and of children? To what extent are the current liquid asset positions of old people related to their attitudes about spending, saving, and investment?

All these and many more are questions about which we may learn something from further data. Meanwhile the finding that so high a proportion of spending units with low incomes in the oldest group had few or no liquid resources is of particular importance in view of the large proportion of low income units in that age group.

Although information on income and liquid asset holdings provides a good index of consumers' funds available for expenditure, it does not by itself give an adequate index of relative economic well-being. Spending unit size, composition, and number of other dependents should be taken into account as well as the so-called nonmoney income from farms and owned homes. In addition we should consider the ownership of other assets such as automobiles, life insurance, other real estate, unincorporated businesses, and securities.

Not all the relevant data are available to fill in these aspects of the picture on age differences in relative economic requirements and resources. However, we do know something about spending unit size, though not yet about the number of other dependents (Table 7). And we do have information on the ownership of some nonliquid assets from surveys that followed the one from which most of the data here are presented.

Table 7

Percentage Distribution of Spending Units, by Age of Head and Size of Unit, Early 1947

NUMBER IN SPENDING UNIT	AGE OF HEAD OF SPENDING UNIT (YEARS)					All Ages
	18-24	25-34	35-44	45-64	65 & over	
One	61	18	11	15	32	21
Two	23	21	19	39	50	30
Three	9	24	16	19	10	18
Four	4	20	27	13	3	15
Five or more	3	17	27	14	5	16
Not ascertained	..	..	..	*	..	*
Total	100	100	100	100	100	100
Number of cases†	250	656	737	1,033	328	3,058

* Less than 0.5 percent.

† See Table 2, note †.

The spending unit varies considerably in size from age group to age group. Although we are examining cross-section data, there seems to be strong evidence for the familiar life cycle pattern that begins with a predominance of single person units and a substantial number of couples in the 18-24 age group. Single units appear to decline through the 35-44 age group while the proportions of larger units rapidly increase. Units of three persons or fewer characterize the broad age group 45-64. Two person units predominate in the oldest group which also contains a substantial proportion of single person units and fewer large units than any except the youngest.

Although we do not have data showing the joint interrelationship of income with age and spending unit size, we may infer that the age groups that tend to have higher incomes also tend to have more persons per unit. This is not inconsistent with other studies of the relation between spending unit or family size and income.⁸ To the degree that this tendency holds we

⁸ See, e.g., Day Monroe, *Chicago Families, A Study of Unpublished Census Data* (University of Chicago Press, 1932), p. 148; Hazel Kyrk, 'The Income Distribution as a Measure of Economic Welfare', *American Economic Review*, May 1950, pp. 352-3; and *Federal Reserve Bulletin*, July 1947, *loc. cit.*, Table 3, p. 793.

are forced to modify impressions gained from a study of income by age groups without reference to unit size.

Other correlates of economic well-being noted in Survey data may be mentioned briefly. The proportion of spending unit heads who are farmers is highest in the age group 65 and over and lowest in the two groups 18-34. In early 1947 they were estimated to be 16 percent of the former and 6 percent of the latter.

From the 1949 Survey of Consumer Finances several observations can be made about the ownership of certain nonliquid assets (Table 8). The proportion of units owning each type tends to increase with age from the level reported by those in the youngest group. But in no instance does the proportion of owners increase beyond the 55-64 age of head group. The proportion of owners of automobiles and life insurance declines with old age to a point equal to or well below that of the youngest age group. Both home ownership and the possession of corporate stock remain stable with respect to the proportion of owners in the oldest age group. In view of the nonmoney income attributable to home ownership the difference between units in the oldest and youngest age groups in the proportions of owners suggests further questions concerning their relative economic resources. Analysis of the interrelations between money income, home ownership, and age would clarify one of the most important of these questions.

Table 8

Ownership of Various Nonliquid Assets by Spending Units in Different Age Groups, Early 1949

TYPE OF ASSET	AGE OF HEAD OF SPENDING UNIT (YEARS)						All Ages
	18-24	25-34	35-44	45-54	55-64	65 & over	
<i>Percentage of Age Group That Owns</i>							
Life insurance	75	82	83	82	74	54	77
Corporate stock ^a	2	5	9	11	10	10	8
Home or farm ^b	9	30	48	57	59	59	45
Automobile	32	56	60	58	46	33	51
Number of cases ^c	343	717	793	739	518	388	3,510

Source: '1949 Survey of Consumer Finances, Part VI: Ownership of Automobiles, Stocks and Bonds, and Other Nonliquid Assets', *Federal Reserve Bulletin*, October 1949, Table 21, p. 1197.

^a Common and preferred stock of corporations open to investment by the general public.

^b Owner-occupied dwelling or farm.

^c See Table 2, note †.

D EXPENDITURES

Up to this point we have noted rather sizable differences among age groups with respect to economic resources. Such differences together with differences in habits and needs may be expected to affect the consumption patterns of spending units in the various age groups. To date, only one survey, the Consumer Purchases Study of 1935-36, has provided information on the complete array of expenditures of consumers in different age groups.⁹ Its findings are summarized briefly.

The data include amounts spent on 15 categories of goods and services, and the value of goods consumed without direct expenditure. 'Value of family living' denotes their sum. Similarly, the income measure to which consumption is related is based upon a concept of money plus imputed or nonmoney income. These data are for couples classified by age of wife. Age groupings were given in 10 year intervals between 30 and 60, along with a youngest group of 'under 30' and an oldest group of '60 and older'. The sample was taken in North Central small cities and North Central and Middle Atlantic villages. Analysis of the Consumer Purchases Study data led to five tentative conclusions.

- 1) Both the average value of family living and average total expenditures in dollar amounts tend to be lowest for couples in the age of wife group 60 and older and highest for those in the age of wife group 30-39. In other words, both measures tend to be higher for couples in the youngest than for couples in the oldest age of wife groups.
- 2) As a percentage of income, both average value of family living and average total expenditures tend to be highest for couples in the age of wife group under 30 years; and both tend to decrease for couples as the age of wife increases up to and including the age of wife group 60 and older.
- 3) The degree to which the average value of family living varies with total income differs from one age group to another. The range of average value of family living from the lowest to the highest income bracket tends to narrow as age increases. Thus the range of average value of family living as a *percentage* of income tends to widen with age. In other words, the income elasticity of consumption for couples decreases as the age of wife increases.
- 4) The difference in the income elasticity of consumption between young and old is partly accounted for by the relation to income and age of the value of goods received without direct expenditure and partly by small differences in numerous expenditure categories.
- 5) Analysis of individual categories of expenditures by couples in differ-

⁹ Department of Agriculture, *Miscellaneous Publication 489*, and 'The Economics of an Aging Population', Ch. V, pp. 98-134.

ent age groups indicates a decline in the demand for durable goods and houses and an increase in expenditures for household operation as age increases.¹⁰

More recent surveys have given information on postwar purchases of automobiles and other selected durable goods, classified by age of spending unit heads.¹¹ These data also show considerable variation in the percentages purchasing such items in different age groups. In 1946, for example, the proportion of purchasers increased from 37 percent of the youngest to just over half of the 25-34 age group, then declined systematically with age to less than a sixth of the oldest age group (Table 9).

Table 9

Purchase of Automobiles and/or Other Selected Durable Goods by Age of Head of Spending Unit, 1946

Age of Head (years)	% of Age Group That Purchased Automobiles and/or Other Selected Durable Goods*
18-24	37
25-34	51
35-44	35
45-64	27
65 and over	16
All ages	34
Number of cases	3,058

* Other selected durable goods include furniture, refrigerators, stoves, washing machines, radios, and electrical appliances, but not rugs or other types of house furnishings.

E SAVING

Whether we are concerned primarily with problems of economic stability and full employment or with problems of controlling inflation during periods of heavy defense expenditures, the proportion of national income saved is considered a strategic variable in the attainment of our economic goals. Examination of the savings behavior of consumers in different age groups should serve not only to provide clues to the possible long run effects of an aging population but also to tell us something about how savings can be expected to vary with changes in income size among consumers in different age groups.

¹⁰ 'The Economics of an Aging Population', pp. 132-3.

¹¹ Data in subsequent postwar surveys show similar relations between such expenditures and age: '1949 Survey of Consumer Finances, Part II: Durable Goods Expenditures in 1948 and Buying Plans for 1949', *Federal Reserve Bulletin*, June 1949, Table 5, p. 650, and '1950 Survey of Consumer Finances, Part II. Purchases of Houses and Durable Goods in 1949 and Buying Plans for 1950', *ibid.*, July 1950, Table 4, p. 783.

In discussing prospective long run developments, an interesting hypothesis has been suggested concerning the relation between an increasing proportion of old people in the population and the relation of savings to income: that the average proportion of income saved by consumers tends to decline as the proportion of old people increases because, it is argued, 'dissaving predominates' among older people.¹²

1 AVERAGE SAVINGS

Spending units in the 18-24 age of head group were, on the average, dissavers in 1946. Those in the next older group were, on the average, small savers as were also those in the group 65 years and older. However, average savings of spending units in the middle age groups were substantially larger than those of spending units in the extreme age groups. Highest average savings were reported by units in the 45-64 age of head group (Table 10).

Table 10

Savings Mean Ratios, Income Mean Ratios, and Ratios of Mean Savings to Mean Incomes by Age of Head of Spending Unit, 1946

Age of Head of Spending Unit (years)	Savings Mean Ratio*	Income Mean Ratio*	Mean Savings as a % of Mean Income
18-24	-15	57	-3
25-34	57	95	6
35-44	136	118	12
45-64	149	116	13
65 and over	55	57	10
All ages	100	100	10
Number of cases	3,058	3,058	3,058

* The 'mean ratio' of savings was computed in the same way as the 'mean ratio' of income; see Table 1, note *.

Because the rank order of average savings follows rather closely the rank order of average incomes for spending units in different age of head groups, we might expect to find relatively little difference among age groups with respect to average savings as a percentage of average income. Important differences, however, did occur. Despite large differences in average incomes, spending units in the oldest age of head group tended to save, on the average, almost the same percentage of their incomes as spending units in the middle age groups. In contrast to this are spending units in the youngest age of head groups who, as noted earlier, dissaved

¹² George Terborgh, *The Bogey of Economic Maturity* (Machinery and Allied Products Institute, 1945), pp. 60-2.

and those in the next to youngest group who saved on the average a relatively small proportion of their incomes.

In 1946 the proportion of dissavers tended to decline systematically as the age of the spending unit head increased (Table 11). Differences between the extreme age groups were pronounced: about two-fifths of the youngest and a sixth of the oldest reported dissavings. Zero savers consti-

Table 11

Percentage Distribution of Spending Units by Age of Head and Amount of Savings, and by Age of Head and Percentage of Income Saved, 1946

Savings ^a	Age of Head of Spending Unit (years)					
	18-24	25-34	35-44	45-64	65 & over	All Ages
AMOUNT						
Negative	40	35	24	21	16	26
\$500 & over	12	14	9	6	6	9
100-499	19	14	10	10	6	11
1- 99	9	7	5	5	4	6
Zero	10	4	5	6	24	7
Positive	48	58	67	68	55	63
\$1- 99	22	12	13	14	19	15
100- 199	9	7	8	8	9	8
200- 499	9	14	16	17	13	15
500- 999	7	13	15	14	8	13
1,000-1,999	1	9	9	10	4	8
2,000 & over	1	3	6	5	2	4
Not ascertained	2	3	4	5	5	4
Total	100	100	100	100	100	100
PERCENTAGE OF INCOME SAVED						
Negative	39	34	24	20	16	26
25% & over	15	12	10	7	10	10
10-24	12	10	5	5	3	7
1- 9	12	12	9	8	3	9
Zero	10	4	5	6	24	7
Positive	49	58	66	68	54	62
1- 9%	23	22	24	24	20	23
10-19	12	14	17	17	13	15
20-29	7	10	9	11	9	10
30-49	4	7	11	11	5	9
50 & over	3	5	5	5	7	5
Not ascertained	2	4	5	6	6	5
Total	100	100	100	100	100	100
Number of cases ^c	250	656	737	1,033	328	3,058

^a Some of the subtotals for negative and positive savers as well as the proportions of 'not ascertained' cases are not identical because a few cases for which amounts saved were given were not ascertained with respect to income and consequently with respect to the percentage of income saved; some differences in subtotals are due to differences in the rounding of component figures; and a few differences to coding inconsistencies between amounts and percentages saved for a few cases.

^b Less than 0.5 percent.

^c See Table 2, note †.

tuted relatively small proportions of all age groups except the oldest. Roughly a fourth of this group neither added to nor drew on their accumulated savings.

The proportion of savers increased from a low in the age group 18-24 to a high point during middle age, then decreased in the oldest age group to almost as low a level as in the 18-24 age of head group.

2 SIZE DISTRIBUTIONS OF DISSAVINGS

Like the proportion of dissavers and that of units in each dollar amount dissavings bracket, dissavings as a *percentage* of income tended to decline as the age of the head of spending units increased.

The difference between the extreme age groups in the percentage of large dissavers is proportionately smaller if large dissavers are defined as those who dissave 25 percent or more of their incomes, than if they are defined as dissaving \$500 or more. Contrariwise, the percentage of small dissavers shows proportionately larger differences between the extreme age groups if defined to include those who dissaved 1 to 9 percent of their incomes than if defined to include those who dissaved up to \$100.

From these small but systematic differences in the degree of relation to age of dollar amounts dissaved and percentage of income dissaved, we may infer that dissavers in the oldest age group had relatively lower incomes than dissavers in the youngest age groups. The income size distributions of dissavers in different age groups does in fact show such differences (Table 12).

Table 12

Percentage Distribution of Dissavers by Age of Head and Income Size, 1946

Income	Age of Head of Spending Unit (years)					
	18-24	25-34	35-44	45-64	65 & over	All Ages
Under \$1,000	24	10	16	23	56	22
1,000-1,999	45	23	20	23	29	29
2,000-2,999	22	40	32	28	8	22
3,000-3,999	5	15	18	15	2	15
4,000-4,999	4	7	9	3	1	6
5,000-7,499	..	4	2	4	3	3
7,500 & over	..	1	2	3	1	2
Not ascertained	..	*	1	1	..	1
Total	100	100	100	100	100	100
Number of cases†	99	226	169	200	55	771

* Less than 0.5 percent.

† See Table 2, note †.

The income size distributions of dissavers for the various age groups rather closely resemble the income size distributions for all spending units in the various age groups (see Table 2). Nevertheless, the different distributions of income for dissavers indicate that low income may be more closely related to dissaving for spending units in one age group than for those in another. Further analysis of dissavings in relation to income is presented below.

3 SIZE DISTRIBUTIONS OF SAVINGS

If we define small savers as those who saved less than \$200, medium savers as those who saved \$200-999, and large savers as those who saved \$1,000 or more, we find more small savers among units in the youngest and oldest groups than among units in the middle age groups in 1946 (Table 11). The differences among the middle age groups in the proportions of small savers are not statistically significant. The proportion of medium savers followed a different pattern, being lowest for those in the extreme age groups. Differences in the proportion of large savers among units in different age groups show still another pattern of variation with age. The proportion of large savers increased from the youngest to the middle age groups and declined somewhat with old age.

If we now define small, medium, and large savers in terms of the *percentage* of income saved instead of dollar amounts saved, we get some general impressions of how differences in amounts saved are related to income differences among age groups. For this purpose, we define small savers as those who saved less than 10 percent of their income, medium savers as those who saved 10 to 30 percent, and large savers as those who saved 30 percent or more. Comparing the percentages for *all age groups* found when using these definitions with those found when using the dollar amount definitions, we still have 23 percent as small savers, but 25 instead of 28 percent as medium savers, and 14 instead of 12 percent as large savers. Of course, even were these proportions of all age groups identical, it would not mean that the same spending units had in each case been classified as small, medium, or large savers.

Classifying spending units into small, medium, and large savers on the basis of the percentage of income saved does not reveal significant differences among age groups in the proportions of small savers. The proportions of medium (and large) savers, however, were somewhat higher in the middle age groups than in the other groups.

4 SIZE DISTRIBUTIONS OF AMOUNTS SAVED AND OF PERCENTAGES OF INCOME SAVED AT DIFFERENT INCOME LEVELS

In Section E 2, some questions arose about the relation of savings to income size for spending units in different age groups. By studying the distributions of amounts and percentages of income saved within three income brackets, we may learn more about these relations. It must be stressed that these income groupings are broader than we would choose for the purpose, but are necessitated by the limited size of certain cells in the Survey data. For this reason we can eliminate only in part the effects of income differences among age groups.

Several generalizations about the relations between savings and income apply not only to the data for all age groups in 1946 but also with few exceptions to each age group.

a) The proportion of dissavers does not vary significantly between spending units with incomes under \$1,000 and units with incomes of \$1,000-2,999, but the proportion of dissavers tends to be smaller for units with incomes of \$3,000 or more than for units with smaller incomes.

b) The proportion of zero savers declines systematically as income increases.

c) The proportion of savers increases with income as do also the amounts saved and, in less degree, the percentages of income saved (Table 13).

Although these generalizations apply with few exceptions to each age group, there are striking differences among age groups with respect to savings at different levels of income. The most important seem to occur in the relative proportions of dissavers, zero savers, and savers in different age groups within each of the three income brackets rather than in the relative size of savings.

Although the proportion of dissavers in the under \$1,000 income bracket does not appear to have varied greatly among age groups *under* 65, proportionately fewer of the units with low incomes in the oldest than in other age groups dissaved. In both the \$2,000-2,999 and the \$3,000 and over income brackets, the proportion of dissavers tended to decline systematically as the age of head increased, but more strongly in the latter.

In no income bracket does the proportion of zero savers differ significantly among spending units in the age groups under 65 years. Moreover, the largest proportion of zero savers in each income bracket is among spending units headed by persons 65 and older, although this proportion was not significantly above that of other age groups in the highest income bracket.

The proportion of savers shows a less consistent pattern by age than the ones just discussed. In the lowest income bracket the proportion of

Table 13

Percentage Distribution of Spending Units by Age of Head and Amount of Savings, and by Age of Head and Percentage of Income Saved, within Income Groups, 1946

Savings ^a	Age of Head of Spending Unit (years)				
	15-34	35-44	45-64	65 & over	All Ages
INCOME: UNDER \$1,000					
AMOUNT					
Negative	37	40	34	19	31
\$500 & over	9	15	8	5	8
100-499	13	21	16	8	14
1- 99	15	4	10	6	9
Zero	17	25	20	36	25
Positive	45	31	43	39	40
\$1- 99	30	19	28	21	25
100- 199	8	2	7	8	7
200- 499	5	8	8	9	7
500- 999	2	2	..	1	1
1,000-1,999	..	..	..	..	..
2,000 & over	..	..	..	..	..
Not ascertained	1	4	3	6	4
Total	100	100	100	100	100
PERCENTAGE OF INCOME SAVED					
Negative	37	40	35	18	31
25% & over	19	34	24	14	21
10-24	7	6	5	2	5
1- 9	11	..	6	2	5
Zero	17	25	20	36	25
Positive	45	31	43	39	40
1- 9%	21	16	18	16	18
10-19	10	3	8	6	7
20-29	8	2	5	9	6
30-49	2	8	6	2	4
50 & over	4	2	6	6	5
Not ascertained	1	4	3	7	4
Total	100	100	100	100	100
Number of cases ^d	109	58	123	150	442
INCOME: \$1,000-2,999 ^b					
AMOUNT					
Negative	40	27	24	17	31
\$500 & over	13	10	6	8	10
100-499	19	12	12	7	14
1- 99	8	5	6	2	7
Zero	6	4	5	15	6
Positive	51	66	66	67	60
\$1- 99	17	19	17	19	17
100- 199	7	12	10	12	10
200- 499	14	16	21	19	17
500- 999	8	14	12	12	11
1,000-1,999	5	4	6	5	5
2,000 & over	..	1	..	..	..
Not ascertained	3	3	5	1	3
Total	100	100	100	100	100

Table 13 (concl.)

Savings ^a	Age of Head of Spending Unit (years)				All Ages
	18-34 ^b	35-44	45-64	65 & over	
INCOME: \$1,000-2,999 ^b					
PERCENTAGE OF INCOME SAVED					
Negative	39	27	24	17	30
25% & over	13	10	7	9	10
10-24	12	7	7	5	9
1- 9	14	10	10	3	11
Zero	6	4	5	15	6
Positive	53	66	66	67	61
1- 9%	24	30	27	29	27
10-19	11	15	16	16	14
20-29	8	6	7	7	7
30-49	6	10	10	7	8
50 & over	4	5	6	8	5
Not ascertained	2	3	5	1	3
Total	100	100	100	100	100
Number of cases ^d	512	306	409	110	1,365
INCOME: \$3,000 AND OVER ^b					
AMOUNT					
Negative	28	17	14	11	17
\$500 & over	16	6	5	6	8
100-499	9	6	7	1	6
1- 99	3	5	2	4	3
Zero	c	1	1	3	1
Positive	69	77	80	78	77
\$1- 99	4	6	7	8	5
100- 199	7	4	5	7	6
200- 499	15	19	17	12	17
500- 999	21	20	20	23	21
1,000-1,999	14	16	18	14	16
2,000 & over	8	12	13	14	12
Not ascertained	3	5	5	8	5
Total	100	100	100	100	100
PERCENTAGE OF INCOME SAVED					
Negative	27	18	13	8	17
25% & over	9	4	3	1	4
10-24	10	4	3	2	5
1- 9	8	10	7	5	8
Zero	c	1	1	3	1
Positive	69	76	80	81	77
1- 9%	20	20	23	18	22
10-19	21	24	21	32	23
20-29	11	14	17	13	14
30-49	10	12	14	11	12
50 & over	7	6	5	7	6
Not ascertained	4	5	5	8	5
Total	100	100	100	100	100
Number of cases	280	365	486	62	1,217

NOTES TO TABLE 13

* For an explanation of differences in subtotals of negative and positive savers and in the proportions not ascertained, see Table 11, note a.

^b The combinations of \$1,000 income brackets above the 'Under \$1,000 income' bracket and the combination of the two youngest age groups were determined by the limited number of cases in various age and income cells, not by considerations of the age and income classifications that would be most useful for purposes of analysis.

^c Less than 0.5 percent.

^d See Table 2, note †.

savers did not vary significantly among age groups for the number of cases in the sample. In both the income brackets \$2,000-2,999 and \$3,000 and over, on the other hand, there were somewhat fewer savers in the 18-34 age group than in the older ones, but no significant differences among other age groups with respect to the proportions who saved during 1946.

The tendency for differences in the percentages of income saved to be still smaller than differences in the amounts saved is probably related to within brackets differences in incomes among units in different age groups.

From Table 13 we can now develop a more general hypothesis about the interrelations of savings, income, and factors associated with age. The size distributions indicate that were these data presented in terms of average savings for each age-income group, the income elasticity of savings would tend to increase with age. This relation among averages would hold mainly because a relatively large proportion of young people with high incomes are dissavers rather than because most old people tend to be relatively small savers at low income levels and relatively large savers at high income levels. Still stronger evidence was found for this relation in data for 1945, and it was indicated also quite clearly in data for 1935-36 from the Consumer Purchases Study.¹³ During 1947 and 1948, on the other hand, the income elasticity of savings appears to have differed less markedly among age groups, probably because of a combination of changes including the rise in prices paid by consumers, the different relative changes in incomes of spending units in different age groups, and the shift into the oldest age group of some units with substantial liquid asset holdings.¹⁴

Another way of stating the difference in income elasticity of savings between old and young is to say that the former's expenditures vary less with income. Further research would be required to explain why, yet we may venture several reasons. First, older people may have relatively fixed habits of living which are much less sensitive to income differences. Second, expenditures for durable goods probably differentially affect the savings-income relation of old and young, for, as noted above, many more

¹³ 'The Economics of an Aging Population', pp. 153-64.

¹⁴ Janet A. Fisher, 'Post-War Changes in Income and Savings Among Consumers in Different Age Groups', *Econometrica*, January 1952, pp. 47-70.

of the young than of the old make such expenditures. Still further light may be thrown on the question of income elasticity of savings in relation to age by studying the interrelation of income size, income change, and savings in the various age groups.¹⁵

How the relations between savings and age of head of spending unit at different income levels are related to differences in liquid asset holdings does not seem readily apparent from the present data. That so many old people with low incomes were zero savers in 1946 may be related to the finding that many of them had no liquid resources upon which to draw. Yet this would not account for the differences between the proportion of zero savers in this and other age groups, because no differences were discriminable between old people and others with respect to the proportions of zero asset holders in the under \$1,000 income group (see Table 6). Without a four-way cross-tabulation of savings with income, liquid asset holdings, and age, it is difficult to infer what the interrelations are. Such a tabulation from currently available Survey data would not be of much assistance in answering the questions posed, for with relatively few cases in many of the cells in such a tabulation, large sampling errors would prevent us from drawing reliable conclusions.

One question raised at the beginning of this section was whether dissaving predominates among consumers in the oldest age group. The data just presented indicate not only that dissaving does not predominate among consumers in the oldest age group but also that members of this group save on the average about as high a percentage of their income as consumers in the middle age groups and a higher percentage than consumers in the youngest age group. In addition, the proportion dissaving among consumer units in the oldest group tends to be relatively small in comparison with younger age groups. Nevertheless, these tentative findings do not necessarily invalidate the hypothesis about dissaving among old people. There are several reasons why they do not.

First, the samples used in all three Surveys were not designed as efficiently as they could be for the specific purpose of analyzing the economic behavior of people in different age groups. Therefore, no attention was given to obtaining adequate representation of all kinds of old people. For example, the sections of Florida and California where the wealthier old people may settle after retirement are not included. To the extent that old people in such areas have a different savings pattern from old people in

¹⁵ For information on past and expected changes in income see 'The Economics of an Aging Population', pp. 69-78; and 'Postwar Changes in the Income of Identical Consumer Units', *Studies in Income and Wealth, Volume Thirteen*, pp. 76-81.

the areas represented, some bias is introduced into our findings from the data we have used.

Second, there is as yet no general agreement about the definition of savings. Definitions different from the ones used here would possibly lead to different conclusions. For example, if transfer payments were excluded from both income and saving, many more consumers in the oldest age group would probably be found to have dissaved. Moreover, if durable goods purchases were classified as savings instead of as expenditures, many more consumers in the younger age groups would probably be classified as savers instead of dissavers. Similarly, there might be an upward shift in the amounts saved by savers in the younger age groups. Just what the size of the differences in savings patterns for different age groups would be were savings defined differently can be discovered only by further research.

F ECONOMIC LIFE CYCLE PATTERNS

Let us now consider how the data reported here can be related to our hypotheses about the economic life cycle of an individual family. But first it is important to point out one major difference between the nature of the life cycle hypothesis and the available data. In discussing an hypothetical life cycle pattern we were concerned with the complete economic history of a single family or the histories of a group of families. In the data presented, information is given about the economic status and economic behavior of groups of families (or spending units) classified by age at a particular time. From these data, however, some comparisons can be made with the hypothetical life cycle pattern.

From averages we find a tendency for income to follow fairly closely the general pattern of increase, decline, and stabilization presented in the hypothetical case. Yet there is no information in the Surveys to reveal whether a decline in income is characteristic of the period shortly after marriage, nor do we know what effect supplementary earners and income from capital have upon the income cycle.

Income distributions for different age groups force us to modify these statements about a life cycle pattern, for although young people appear to be relatively homogeneous with respect to income size, more diversity in income size characterizes middle age. With old age, a still greater divergence is introduced by the retirement of a substantial number and the continued high salaries and/or receipts from capital of another fairly large group. Some of the variation of income within individual age groups may be related to within age group differences in age. For example, an income distribution for all families headed by persons 65 years old would prob-

ably show less variation than the income distribution of families headed by persons 65 and older. To the degree this would not be so, income differences among families in different age groups may be considered to reflect several life cycle patterns. More could probably be learned about the validity of this explanation from information on occupation and family size differences.

Information on average liquid asset holdings also suggests an over-all life cycle pattern: an increase in holdings from the time of marriage through middle age and a small decline in holdings with old age. Again, however, size distributions suggest that different life cycle patterns might be found by classifying families by more of their characteristics than has been possible in this study.

Similarly with consumption and saving: certain general patterns in the data include a tendency to buy durable goods at the younger age levels and for many who do so to dissave. From distributions of expenditures and savings, however, we find a considerable diversity in economic behavior within age groups that, as far as we can tell, is rather closely related to the diversity in income size and in liquid asset holdings within age groups. To ascertain to what degree these within age group economic differences may be related to the within age group differences in age, additional data would be required for more restricted age groupings.

Some factors other than age that also may be associated with differences among possible life cycle patterns have already been mentioned. In addition to the occupation of family heads and changes in family size and composition, it might be worth while to study age patterns separately for metropolitan, other urban, and rural areas; groups living in different regions; native and foreign born groups; negro and white groups; and groups with different educational backgrounds.¹⁶ Information of such kinds would not only help us to understand better the contemporary economic differences among age groups but also furnish a better basis for anticipating changes in both the economic status and behavior of consumers of various ages, and hence of all consumers.

¹⁶ For a study of differences in savings patterns of all age groups in different types of communities and in negro and white groups, see Dorothy S. Brady and Rose D. Friedman, 'Savings and the Income Distribution', *Studies in Income and Wealth, Volume Ten* (1947), pp. 250-66.