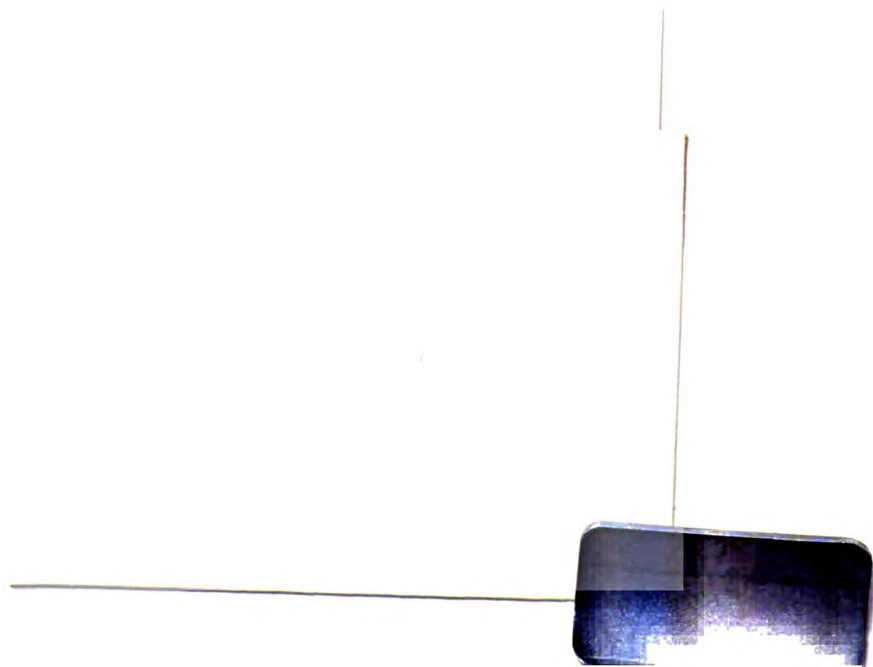


IMPLICATIONS FOR FAMILY FINANCIAL MANAGEMENT
BASED UPON CURRENT RETIREMENT PLANS OF A
SELECTED GROUP OF MICHIGAN RESIDENTS

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ABSTRACT

IMPLICATIONS FOR FAMILY FINANCIAL MANAGEMENT BASED UPON CURRENT RETIREMENT PLANS OF A SELECTED GROUP OF MICHIGAN RESIDENTS

by Ruth Miller Reinoehl

The purpose of this study was to analyze the anticipated financial resources and plans for retirement of a selected group of Michigan residents and to draw implications from the findings for teaching family financial management. A review of the literature showed that many studies were concerned with the sociological and psychological aspects of retirement, but few focused on individual financial planning for retirement. As the aged segment of the population becomes larger and the span of retirement years becomes longer, adequate financial planning for this period is of greater importance. Pensions of various types and Social Security benefits provide most of the income for retired persons, but since the vast majority of these are fixed dollar incomes they are adversely affected by inflation making supplemental income necessary if the level of living for the retired is to remain constant throughout the retirement years.

The sample for this study consisted of 403 persons employed in various capacities at a university. The data, originally gathered for another purpose, was collected by means of a mailed questionnaire.

The following hypotheses were developed as focal points for the analysis of the data:

1. A significant relationship exists between the estimated retirement income and the distribution of sources that make up the estimated retirement income.

2. A significant relationship exists between the estimated retirement income and the amount of that income that comes from variable dollar sources.

3. The higher the expected level of estimated retirement income the earlier the retirement income planning occurred with respect to the age of the recipients.

Within the limits of the data, hypotheses one and two were supported. Of the 158 persons expecting estimated retirement incomes from five or more sources, 59 percent were in the higher range of expected retirement income (\$6000-\$10,000 and over) and only 13 percent in the lower range (\$0-\$5999).

The data did not distinguish between all variable and fixed dollar sources of expected retirement income inasmuch as stocks and bonds were combined into one category and Teachers Insurance and Annuity Association and College Retirement Equities Fund combined in another. However, the results of the statistical testing of the second hypothesis strongly suggested the existence of a significant relationship between the estimated retirement income and the amount of that income derived from variable dollar sources.

Hypothesis three was neither supported nor negated by the data, since information on when the older respondents started their financial planning was not available. The analysis of the data does show a trend in the timing of the accumulation of assets in relation to age. For the respondents under 50 years of age, real estate and life insurance were the major areas of investments. For those persons over 50 there was a considerable increase in investments in stocks, bonds and savings, real estate remained fairly constant, and life insurance became less important as the age of the respondent increased.

The evidence suggests some important implications for those interested in the teaching of family financial management. Among these are the need for encouraging an active interest in including preparation for this part of the life cycle in the family financial plans long before the actual retirement age is reached, and for emphasizing the necessary skills for making and carrying out realistic financial retirement plans.

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by

Ruth Miller Reinoehl

A THESIS

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CHAPTER I

INTRODUCTION

Retirement is a complex phenomenon -- no one area of study can deal with all of its ramifications. The basic problem is one of change. Eugene Freidman and R. J. Havighurst have identified five functions of work and employment as providing for income, expenditure of time and energy, meaningful life experience, social relations and identity.(26) Retirement means that a substitute must be developed to fill these functions if a successful adjustment to retirement is to be achieved.

A study of this portion of the life cycle is becoming increasingly important as this segment of the population becomes larger. In an investigation of the changes in social and economic characteristics of the 65 and over age group, Maria Davidson found that while the population as a whole had increased two and one-half times between 1900 and 1960, the 65 and over age group had increased more than five times.(13) In an article reviewing recent research projects, Otto Reid sets the proportion of the population in the 65 and over age bracket at slightly more than nine percent of the total population.(24) Elaborating further, in 1900 a man of 60 could expect less than three years of retirement,

but by 1961 a man of 60 could expect more than eight retirement years.(6, p.117) The lengthening of the retirement period adds to the complexity of the problems faced by this group of people, their families, and, indeed, the society as a whole.

Harold L. Orbach and Clark Tibbitts, writing in the introduction to a collection of essays on aging, say, "The dramatic impact which aging has thus had and continues to have upon the economy in economic terms is matched by the corresponding impact on the political and social structure of society. Questions of economics are rapidly transformed into questions of social policy and underlying these are basic political and social values."(5, p.11)

Retirement means a change in the socio-psychological situation of the individual. Writing in the International Social Science Journal, Hans Thomae sees the relationship between aging and adjustment as a problem of the whole life-span. He states that changes of this type call for many adjustments and that success in making these adjustments depends on an individual learning, with increasing age, "the art of making compromises with his imperfect life."(28) Peck identifies the most important factors in a successful adjustment to old age as "developing a varied set of activities and enriching attributes" so that after the individual leaves the labor force he has provided himself with a set of alternatives that can be pursued and that will provide a sense of satisfaction and fill the hours that were formerly filled by work with other worthwhile activities.(28)

During the life cycle stages which precede retirement, roles and status are fairly well defined. Through education and social activities, the individual prepares for changes throughout the growing up and employment periods. In contrast to this, society provides no preparation for retirement. The social definition of old age is abrupt and there is no schooling to prepare for this drastic change. Many find the reduction of roles and the decrease in the number of groups to which one belongs very upsetting. The old tend to be isolated, and very often isolated from the values most prized by Americans, such as achievement, success, activity, work and progress.(17)

Retirement has other implications. Studies conducted in 1948 by Sheldon, in 1953 by Batchelor, and by Anderson and Cowan in 1956, state that in many instances retirement is actually harmful to health.(20) Other studies show increases in illness in the ten years prior to retirement and also indicate that physical illness at this time of life is highly psychological and related to the imminence of retirement.(20)

These studies show only a few of the many adjustment problems faced by the retiree. They indicate the far-reaching nature of the changes that must be met, and the importance of thorough preparation for this stage of the life cycle. Obviously, there is no one solution to assure successful and happy retirement years; the White House Conference on the

Aged stated, however, that the factor that seems to provide the most help toward this goal is an adequate and assured income. (6, pp.117-125)

Since the 1930's many improvements have taken place in the form of income maintenance programs to insure some income to the aged. Even so, by today's standards the level of living for a great many of these people is far below that of the younger segments of the population.

For most persons who have completely left the labor force, Social Security alone, or in addition to private pensions from their places of employment, makes up all or the major portion of retirement income. The benefits paid to the retired and the aged survivors under Social Security and related income maintenance programs have increased since the initiation of the programs, but at a slower rate than the increase in average income of the total population. As a result, the retiree has had a smaller share of the total consumer income in each of the years since 1945 than he did in that year. (7, p.93)

Money incomes are meaningful only in terms of the goods and services they can supply. Since 1946 there has been a significant inflation, and consequently dollars have bought less and less. Most private pensions provide for fixed-income payments and increases in Social Security benefits have not kept pace with the rising cost of living. Therefore the burden of inflation weighs heavily on most retirees.

Family economics must concern itself with learning more about the financial position of this group of people. The

retired make up an increasing proportion of the population. Their savings and investment programs initiated earlier in the life cycle have an important influence on their period of retirement. A realistically planned program, if developed during the productive years, can have far-reaching effects on the financial position of retirees. It is the task of family economists to help persons become aware of these facts and to provide information for making and carrying out such plans. The purpose of this study is to analyze the expected retirement incomes and the financial plans for retirement of a group of Michigan residents. This analysis will provide valuable information about the plans for retirement income which are being made by employed persons in the three decades prior to retirement. Analyzing the timing of accumulation of pension funds, assets, and the size and composition of the expected retirement income, by age categories, will provide information about the long-range retirement plans of this group. It will also show the kinds of supplemental retirement income that have been included in retirement planning, and suggest the age at which such planning is most effective.

Objectives

The objectives of this study are:

1. To study the anticipated financial resources and plans for retirement of a selected group of Michigan residents.
2. To draw implications from the findings for teaching family financial management.

Hypotheses

1. A significant relationship exists between the estimated retirement income and the distribution of sources that make up the expected retirement income.
2. A significant relationship exists between the estimated retirement income and the amount of that income that comes from variable dollar sources.
3. The higher the expected level of estimated retirement income the earlier the retirement income planning occurred with respect to the age of the recipients.

Operational definitions

1. Estimated retirement income: This is the sum of the respondents estimation of the amount he will receive from the following sources after retirement (university pension, TIAA-CREF, Social Security, Civil Service, State of Michigan, royalties and patents, and other sources).

2. Potential estimated income: This is made up of the estimated income plus the potential yield from the following assets (cash value of life insurance, savings, and stocks and bonds). This yield is computed by projecting the sum of these assets at four percent per year.

3. Modified estimated income: This is made up of the estimated income minus the income from the category termed "other sources."

4. Social Security: This term, as used throughout the text, refers to the Old-Age and Survivors Insurance program.

CHAPTER II

REVIEW OF LITERATURE

There is much literature dealing with the financial position of the aged citizen. Studies show both the income distribution for the aged and the sources of this income. However, little information is available on plans for retirement. Lenore Epstein discussed some of the problems in assessing the economic status of the aged in the United States in a paper presented at the fiftieth International Congress of Gerontology. Retirement brings a cash income reduction but this is partly offset by savings and property. This presents the problem of how to "add" assets to current income for a real measurement of economic status. Another problem arises from the fact that not all studies use the same terminology and, thus, comparisons between studies are difficult. However, a broad generalization emerges: that "aged persons, families or spending units whose incomes are lowest and who would benefit most from assets that could be converted into cash are the least likely to have them."(9, p.248)

The review of literature falls into five natural divisions, made up of: income distribution, sources of income, assets, impact of inflation and preparation for retirement.

Income Distribution

A very high percentage of persons 65 and over have incomes far below the latest estimate by the Bureau of Labor Statistics of the amount required for a moderate living standard (\$3840 for the aged couple with the head of the family 65 or older in late 1966).(40) Different studies provide somewhat different income distributions because of variations in definitions of spending units, but all agree on that point.

The 1960 census includes 15 million persons 65 and over who were not residing in institutions. The individual income distribution of this group shows 55 percent with incomes of less than \$1000, 23 percent with incomes between \$1000 and \$2000 and nine percent with between \$2000 and \$3000 per year. Only 13 percent received more than \$3000 per year. Of the 6.2 million families in this survey with the head 65 or over, more than half had incomes under \$2830 and one-fourth had less than \$1620 per year.(34)

Gladys White found, in research conducted in 1961, that the incomes of the 65 and over group were less than half those of younger persons. In spite of increases that had taken place prior to her study which improved the income status of the aged, the economic gap between the old and the young widened. The median money income in 1961 was listed as \$3026 for the older families and \$6099 for families in which the head was under 65 years of age. Of the total of 6.7 million

older families in the study, 31 percent had incomes of less than \$2000 per year. This same research reported that, among single consuming units, three percent of the 7.5 million males and 21 percent of the 9.1 million females had no money income. The median income for single women 65 and over was \$854 per year.(32)

White also listed three factors involved in the unfavorable income position of the old. These were: a lack of employment earnings, fewer income recipients in the family, and a preponderance of women among the old.(32)

The 1961 Survey of Consumer Finances examined the income position of spending units. A spending unit was defined as "a group of persons residing together who are related by blood, marriage or adoption and who pool their income."(5, p.70) The proportion of spending units with incomes less than \$3000 headed by persons from 55 to 64 years of age is twice that of spending units with the head from 44 to 54. This proportion nearly doubled again for the units where the head is 65 or over. Sixteen percent of all spending units had incomes of under \$2000 per year and of this income level 47 percent were spending units where the head was 65 or over.(5, pp.73-74)

Findings from the 1963 Survey of the Aged show that the median income of couples with the head 65 or over was \$2875 and single persons in this age group had median incomes of \$1130. Families in this aged group made up one-third of all families counted as poor.(15) By the 1963 Bureau of Labor

Statistics standards, 58 percent could have provided a "modest but adequate" level of living for themselves out of their actual 1963 income, six percent could have met this level by prorating their assets (not including their house) and adding to their money income. This left 36 percent below this level and who could not be considered economically independent.(10) To maintain this "modest but adequate" level of living an aged couple needed \$2500 per year.

Mollie Orshansky looks at poverty among the aged using the United States Department of Agriculture economy food level as a basis for identifying the poverty group and determining a total minimum income requirement for different types of families. This economy food level as of January, 1964 provided for foods costing \$4.60 a week per person. It amounts to 75 to 80 percent of the United States Department of Agriculture basic low cost food plan, which has been used for many years by agencies concerned with needy families as a basis for food allotments. The economy plan was designed for "temporary or emergency use when funds are low." (39) The computation involved in using this food level to determine a definition of poverty uses the cost of food per person, adjusted for family size. It defines poverty as "income less than three times the cost of the economy food plan for families of three or more persons." A standard of roughly \$3130 per year for a four person family results. Orshansky suggests this method as an eligibility criterion for some poverty programs.

However, most of the aged persons live in either one or two unit households and this presents added problems. Households of this size have relatively larger fixed costs relative to per capital income. At the economy level, the two member family requires about 54 percent of the four person allowance and the added diseconomy of the single person household demands an income of 80 percent that of the two member family. Orshansky suggests the poverty cut off level at \$1855 for the non-farm couple aged 65 and over, \$1480 for the male, and \$1465 for the female single unit households.(39)

According to Orshansky's statistics there are 34.6 million poor and among them about 5.2 million aged persons. The poorest of these are the elderly relatives living in homes of younger family members. In March, 1964, there were about 2.5 million with these living conditions. Naturally there are many reasons for arrangements such as these, but the financial position of these persons was a major factor.(39)

In 1963 more than 40 percent of the men and 80 percent of the women living alone had incomes below the economy level. If the aged poor from all living arrangements were added, those living in families too well off to be included in the economy level, the number would rise to almost 7 million. Orshansky concludes, "Two-fifths of the population aged 65 or older (not in institutions) are thus presently subject to poverty, or escaping it only by virtue of living with more fortunate relatives."(39)

Epstein sees the low income of the aged as caused in large measure by the fact that so few of these people are employed. Her research shows that in 1960 only one-sixth of the men 65 and over worked for 50 weeks or more and only 43 percent worked at all during the year.(5, p.95)

Sources of Income

A closer look at the sources of income reveals that employment plays an important part in the aggregate income of the aged in spite of the fact that only a few are full time employees and that less than half are part time workers. In 1953 the largest single source of income of the aged was regular employment.(16) Between 1947 and 1952 the average monthly percentage of men over 65 in the labor force declined from 47 percent to 42 percent. During the same period the proportion of aged dependent in whole or in part on social insurance and related benefits almost tripled.(16)

A staff report to the United States Senate special committee on aging provides a break down of the number of persons receiving public retirement benefits in 1961. This report shows 11 million receiving Social Security benefits, 2.3 million receiving Old Age Assistance and three-quarters of a million receiving assistance to supplement Social Security payments. This survey found that most of those aged who were employed also received Social Security benefits.(34)

The 1963 Survey of the Aged reports that earnings still make up a sizable share of the income of the aged. In 1962, 32 percent of the aggregate money income of all persons and their spouses aged 65 and over came from earnings from either part or full time work.(15)

Benefits from public income maintenance programs made up 46 percent of the total aggregate money income of the aged. Of this amount 30 percent came from Social Security benefits, twelve percent from public assistance and four percent from veterans benefits. Benefits from private retirement programs accounted for about three percent of the aggregate. There is much overlapping in this area of sources of income.(15)

Old Age Assistance was reported more often by the non-married than the married persons in the 1963 survey. Nearly 90 percent of the couples and 80 percent of the non-married reported income from some type of income maintenance program.(15)

David Eppley reports that the liberalization of the income maintenance provision of the Social Security Act in 1950 and further changes in more recent years have expanded the coverage of this program by reducing the eligibility requirements and raising the benefit levels. This has increased the number of recipients of Old Age Assistance and also the proportion that receive this aid concurrently with Social Security benefits. The number of persons receiving both Old Age Assistance and Social Security benefits rose from 146,000 in June, 1948 to

816,100 in February, 1963. However, even with this large increase the group receiving both benefits is declining in proportion to all Social Security beneficiaries.(14) The average payment to Old Age Assistance recipients in 1963 was \$85.79 per month and for those on both programs it was \$107.09 per month.(14)

The states limit the payment to the Old Age Assistance recipients(14) and an individual must be in need as defined by the state in which he resides to qualify for this income maintenance program.(31) White defined being in need as having "insufficient income or other resources to meet the requirements necessary to maintain a standard of living compatible with decency and health." More than half of the states failed to meet this definition of need. In 1960 the unmet needs of the Old Age Assistance recipients averaged \$9.46 per person per month.(31)

Next as a source of funds for the 65 and over group were interest, dividends and rents. These items made up fifteen percent of the aggregate money income. Slightly more than three-fifths of the total persons in the survey reported some income from these sources, but for more than half of this number, the amount received was \$150 per year or less.(15)

It is clear that the two main sources of income for the aged are continued employment and pension benefits. However,

continued employment, as an option, may not be open to all. There is a small group of older people, made up mainly of some professional and craft groups, that have such rare skills that they can continue in their work as long as they are capable of working or wish to do so.(5, p.36) Others may be able to extend their employment for a few years past the age of 65 if they so desire, but these too are mainly professionals. In most employment situations retirement at 65 is compulsory, so continued employment for these individuals means finding a new job. This majority of older workers have no special skills. (5, p.36)

A study by Davidson investigating changes in labor force participation of the aged found a gradual decline to age 64 and after 64 a sharp drop in the number of persons in the labor force.(13)

Research findings described by J. A. Jaffe and J. R. Milavsky indicated that it was much more difficult for the aged to find new jobs than it was for younger workers. Among the reasons for this were the reluctance of the employers to hire the aged and much less voluntary mobility displayed by these workers. This was also found to be true of the group just under the retirement age. The unemployment rates were high for those close to retirement age and a large proportion of these persons exhausted their unemployment benefits.(9, pp.279-83) Some of the 65 and over age group may be denied an opportunity to work for reasons of health.

Palmore reports that in 1962 three out of four aged did not work. Even so, there were more aged workers in 1962 than in 1950, but because of the greater total number of the aged they represented a proportional decline. He also found that the proportion working full time decreases sharply with age.(23)

A recent survey of activities of old people in Benzie County, Michigan, conducted by Jeannette Shauko, found that two-fifths of the male aged were still engaged in either full or part time employment, but that only those engaged in agriculture and related occupations had continued to work in the same occupations after retirement age.(8, p.68)

Assets

The assets of the retiree, accumulated during his productive years, make a potential source of income. There is general agreement throughout the studies dealing with this topic that most of the savings of this group of people are tied up in homes or life insurance rather than in forms that produce an income or are readily convertible into cash. The studies support the general conclusion that those most in need of supplemental incomes are least likely to have any assets.

A 1959 Federal Reserve Board survey investigated the liquid assets (defined as bank accounts or savings bonds) of some 8 million spending units with the head of the unit 65 or over. The findings showed that 29 percent had no assets of this kind, 17 percent had \$500 or less, 21 percent had from \$500 to \$2000

and 33 percent had over \$2000. 1 When these percentages were related to income, it was found that in the units with an income of less than \$3000, 47 percent had less than \$200 in liquid assets and 44 percent had assets of \$500 or more. Only eleven percent of the total number of spending units owned any corporate stocks and bonds or marketable government securities. All of this eleven percent were among the group that reported having at least \$2000 in other liquid assets.(34)

Data from a Michigan survey show very similar findings. This study was conducted by the University of Michigan and published in Study of Hospital and Medical Economics, Michigan Population Survey.(9, p.246)

Epstein sees the relationship between assets and income as not unexpected since both income and assets available after retirement are related to the earnings of earlier years and to the opportunity afforded by these earnings to accumulate savings. Furthermore, the extent to which these assets are income producing affects the potential income after retirement.(9, p.249)

The 1963 Survey of the Aged found that the vast majority of the aged had small asset holdings.(15) These people either found it impossible to save during the years before retirement or their savings were used for other purposes. Reasons given in the survey for using retirement savings were emergencies, education of the family, or to help their children to establish a home. This study found that the value of all assets (including all real property other than homes) amounted to less than \$1000 for two-fifths of the aged couples. Thirty percent of the aged

couples had holdings worth \$10,000 or more, while less than 30 percent of the non-marrieds had assets of as much as \$5000. These findings indicated that few aged spending units had financial assets such as savings, checking accounts, stocks, bonds and money loaned to others, that could be drawn on in case of emergency or for current living expenses.(15)

Charles Lininger, using the 1961 Survey of Consumer Finances as the source, reports that one-fifth of all spending units with the head 65 or over had assets of under \$1000 or none at all. About 40 percent of the aged group in this study with incomes below \$2000 had "very limited" assets.(5, pp.74-78)

Life insurance is a fairly common asset among older persons, but a government study done in 1961 found this type of saving less often among the 65 and over aged group than among other age groups. Seventy-nine percent of all spending units owned life insurance as compared to 56 percent of the units where the head was 65 or over. The general conclusion was that the policies of the aged were of relatively low face value and many had no cash surrender value. These could be used to pay burial cost or to meet some of the bills of terminal illness, but would not help meet current expenses.(34) Insurance holdings of Social Security beneficiaries were analyzed in this study. Seventy-one percent of the married beneficiaries carried some life insurance with a median face value of \$1850. Fifty percent of the non-married beneficiaries carried insurance with a median value of less than half that amount. Only nine percent of the married beneficiaries had insurance valued at \$5000 or more.(34)

Home ownership is the most common form of saving for the aged. The 1959 census data shows 66 percent of the non-farm aged owned their own homes and of these, 83 percent were owned free and clear. This data also found that, among the aged group with liquid assets of \$200 or less, half lived in rented housing or shared the homes of relatives.(34)

The 1963 Survey of the Aged reported home ownership for three-fourths of the couples in the 65 and over age group and for two-fifths of the aged non-married.(15)

Epstein concludes that a paid-up home is a financial advantage enjoyed by many retired persons, but here too, as was the case with the other assets, those with the most limited financial resources are the ones least likely to have this advantage.(9, p.253)

Impact of Inflation

It was found at the White House Conference on Aging that the question of inflation worried those individuals who were retiring as much or more than any other problem they would have to face.(5, p.218)

In the past, the farm or small businesses played a prominent role in the income for the retiree, but today dependence has shifted from such money incomes to savings, the benefits from Social Security, and/or private pensions. To a great extent these are fixed-dollar incomes, and this, combined with the longer expected retirement period, makes the effects of inflation very serious.

Adjustments in differing degrees and at different time intervals have been made in most public income maintenance programs. Old Age Assistance programs and Social Security benefits are among those that have been adjusted. For example, the White House Conference on Aging reports that a man retiring in December, 1940 would have received Social Security benefits of \$22.60 per month. As a result of adjustments in Social Security payments a man retiring under the same conditions, in December, 1959, would have received \$55.00. In terms of 1959 dollars the buying power of the 1949 \$22.60 would have provided \$47.10 worth of goods and services.(37)

Relatively few private pension plans make any provisions for inflation adjustments after retirement. However, a few plans of this type provide for an automatic adjustment to the consumer index.(37)

What these reports reveal is that many programs provide only a minimum level of living, and this fact makes the effect of any lessening of their purchasing power a serious problem for the aged. Data were not available to show what changes the aged make in their spending patterns when prices rise.(37) Both Goldstein and Youmans found that the aged were more successful in living with available funds than were other groups, but concluded that this may in fact be due to having no other choice.(2, pp.56-63; 33)

Inflation affects the value of savings as well as income. Most kinds of financial assets are much more subject to loss in value than is income since there is a much greater time lag

between the acquisition of the savings or other assets and the time of liquidating and spending them.(37) The greater this time lag the greater the possibility and degree of loss due to inflation.

Debt can be used as one form of hedge against inflation, but the aged are at a disadvantage in using it effectively. This is true because the aged find it difficult to obtain credit. They are considered a poor credit risk since they have lower and less dependable incomes as well as a short life expectancy. The Federal Reserve Board survey found only 31 percent of the aged reporting any debt as compared to 68 percent of all age group.(37)

The National Advisory Committee found that while home ownership served as non-money income and in a sense was a hedge against inflation, it failed to give as much protection as might be expected. In times of rising prices this non-money income was reduced through rising taxes and higher maintenance costs. The increased value of the capital assets only partially offset this increase. This survey reported median value of the equity in home ownership for the aged at \$8100. The National Advisory Committee report indicates that fear of inflation may be a factor in the postponement of retirement when this option is possible.(37)

Compounded over the past ten years, prices have risen about one and three-fourths percent per year. A conservative estimate of the price increases between now and 1975 are set at one and two-tenths percent per year. These statistics show how important

it is for the individual to include plans hedging against inflation when making his retirement plans.(21)

Preparation for Retirement

In general, the literature points to the advisability of careful planning for the retirement years. In a study conducted at Cornell, William Knox found that individuals were more willing to retire if retirement income was expected to be high. The reluctance to retire seemed to be less related to negative feelings toward the new activities that retirement would bring than to feelings of apprehension over the economic position it would bring.(24)

Similarly, Aaron Kosenblatt found that both the amount and source of income have an important social and psychological effect on the aged. Social Security benefits were looked upon as "rewards and earning of past efforts." However, there was a feeling of inferiority by many recipients of Old Age Assistance programs.(26)

A study by Dorothy Wedderburn and recent research projects reported by Reid indicate that the aged individual sets a high value on being able to help himself and meet his own needs. (30; 24) A portion of the subjects in the Shadko study offered recommendations to persons in the younger age group looking toward their retirement period. Included among these suggestions was the planning of financial arrangements for the retirement years.(8, p.69) In each case, a key point of the research findings is the desirability of careful consideration of the financial problems of retirement during the working years.

Research, by George Katona, dealing with the saving behavior of individuals taking part in private pension plans, indicated that, contrary to expectations, these plans did not reduce the amount of money regularly saved. There were 1853 male heads of families in this study all of whom had incomes of \$3000 or more per year. Forty-two percent of the subjects were covered by private pension plans, 52 percent were not and six percent were uncertain of their status. Responding to a question dealing with the ratio between retirement income and current income they expected to receive, only one in ten replied that retirement incomes would be 70 percent or more of their current income. Those with high level incomes felt their retirement incomes would amount to two or three times more than Social Security. The lower level group thought theirs would equal or be less than Social Security. One out of eight felt they would have problems getting along on their retirement income. All persons in the study were expecting a reduction in expenses at retirement.(24)

Goldstein found expenses for the aged group less, but also found that the aged as a group were spending a higher percent of their income for food and medical attention as compared to younger aged units. Housing and household maintenance also increased slightly as a percent of total income while clothing, transportation and furnishings remained the same or dropped.(2, pp.276-77) This study also found those with higher incomes at retirement tend to follow more closely the patterns of spending they held before retirement and that reduced income forces a sharp change in these patterns.(2, pp.56-60)

The Shultz investigation, reported upon by Reid, focused on industrial counseling programs as an aid for retirement preparation. Of the 1601 plants responding, slightly more than eleven percent had such programs. Seventy-three percent of these used personal counseling and the remainder made information available or had group meetings. The results of this study indicate that when counseling was available the individuals knew more about the company policies and programs, were more involved with planning for retirement, and had more favorable expectations for the future.(24)

Reid sees economic status and health as very significant factors in successful retirement. The behavior of an individual prior to retirement and the anticipation of retirement also effect this adjustment. In regard to planning programs he says:

Those who successfully plan ahead are most likely to find their retirement status satisfactory. What emerges from several studies, however, is clear evidence that planning is not simply a matter of individual decision. It is also in good measure a function of ability to plan ahead and to convert speculative plans in actual concrete steps capable of influencing a future situation....Those who have at least moderate economic resources seem to be the ones who are most disposed to make additional financial arrangements for their retirement. It appears also that failure to plan properly for the future is a function of inadequate knowledge concerning what can be done. When individuals are provided with expert advice and counseling on problems of age they seem eager to make use of the services and appear to benefit from them.(24)

Judd Marmor and A. L. Schorr see limitations in the freedom of the individual to plan for retirement. Schorr discusses the factors that affect life income and thinks that they are largely established by the wage earner's mid-twenties. Education is the most decisive factor limiting the income of the individual.(27) Marmor focused on the stress and growing economic burdens associated with the period of middle age.(19) These factors affect the ability to make financial plans for retirement during this part of the life cycle.

Leaving the work force should not mean retirement "from" life but retirement "to" a new kind of life with opportunity and freedom to enjoy useful activities that financial security will make possible. Despite this, the literature reviewed is consistant in finding the income position of most retired persons inadequate for comfortable living. The sources of large proportions of the income of retirees are of a fixed-income type and hence real income is reduced by inflation. These facts point out the importance of making plans to supplement retirement income if at all possible. Little information is available concerning what planning is done by families prior to retirement and when such plans are formulated relative to the age of the head of the family.

This study will focus on the investments that have been made and the amount and sources of retirement income expected by a group of Michigan residents who are currently in the

labor force. It will attempt to look at the possible effects this investment planning will have on their retirement income and to identify strengths and weaknesses in this planning.

CHAPTER III

METHODOLOGY

The data used for this study were originally collected for another purpose, by means of a mailed questionnaire. The respondents were comprised of 403 employees of a midwestern university. Questionnaires were sent to many types of employees, such as food services, grounds maintenance, and clerical, as well as professional persons. No attempt was made to distinguish between the married and non-married or to divide the respondents according to sex. Four age categories were used to divide the subjects. These were: (1) under 40; (2) 40-49; (3) 50-64; and (4) 65 and over. The distribution of the respondents by age category was as follows: under 40 - 3.9 percent; 40-49 - 11.2 percent; 50-64 - 50.1 percent; and 65 and over - 35 percent. Findings will pertain only to this group of persons and no attempt at broader generalizations will be made.

Only a limited number of the questions included on the questionnaire were applicable to this study. A copy of the questions used for this study are found in Appendix A. These were taken from the original questionnaire.

The coding and organizing of the data were done by machine. Two sets of cards were punched, one to record the questionnaire data for each respondent and the other to recode this data into the selected classification.

The first question used, number three on the questionnaire, was one pertaining to the age of the subject. Responses to this question were recoded to give the four age categories: under 40, 40-49, 50-64, and 65 and over.

Responses to questions 54 through 60 on the questionnaire provided information concerning the sources of the subject's expected annual income after retirement. These sources were: university pension, TIAA-CREF, Social Security, United States Civil Service Retirement, State of Michigan (as public school teachers), royalties and patents, and other sources. These sources, with the exception of the last two categories represent income that accrues from automatic and set contributions to retirement funds during the subjects' period of employment. The recoding of these questions consisted of computing mid-points of the money range which the respondent indicated he expected from each source. The mid-points of the seven items were added and this sum was used to indicate the respondent's estimated income level. This procedure was carried through for each subject, thus classifying each subject into one of six estimated income categories. The age groups and estimated income categories were the two general classifications used for analysis throughout the study. A series of tables were constructed by machine for the seven sources of estimated income, one series for each of the four age groups. The tables were used to analyze the sources of estimated retirement income with respect to age group and estimated income category of the subjects.

Using these tables, the aggregate income was determined for the seven sources of income of each of the six income categories within the age groups. Percentages were computed to see what percent of aggregate estimated income each of these sources represented.

Question 62 indicated the value of the real estate held by each subject. These data were not recoded, but tables were constructed by machine putting this information in relation to the age group and estimated income category of each respondent.

Questions 63 through 65 dealt with the cash value of life insurance policies, present market value of stocks and bonds, and savings accounts. These three items were taken as the subjects' individual financial preparation for retirement. This information was recoded and analyzed in the same manner as that dealing with expected annual retirement income.

A total retirement preparation was determined for each income category in the three highest age groups by adding the mid-points for all three assets. From these totals the mean retirement preparation for each income category in the age groups was computed. To determine the potential annual return from these investments, this mean was projected at four percent. The mean potential income was computed by adding the mean estimated income and the figure obtained from projecting the mean retirement preparation at four percent. In this way the effect of individual financial retirement planning could be analyzed in relation to age and estimated income category.

The final two questions used, numbers 66 and 67, indicated the amounts the subject owned in trust accounts and had invested in personal property including household goods and automobiles. These data did not prove to be useful, and these tables were not included in the study. Instead, the information was summarized in the text.

Two problems arose in working with the investment items. The questionnaire made no provision for a separate zero investment for any of the investment items. The first range in the questionnaire was \$0 to \$5000. It was assumed that the majority indicating that response would have zero investments. Thus, this response was taken as a zero investment for all investment questions. As a result these data will be somewhat inexact, but it is hoped that they will be less so than they would have been had this response been computed as a mid-point as was done for the other responses.

The other problem concerned the computing of potential incomes. It became evident in working with the data that the category described as "other sources" might well include sizable amounts of income from the investment sources that were being used to determine retirement preparation such as interest from savings accounts and bonds and dividends from stocks. If this were, in fact, the case, then adding the projected return from the investment to the estimated income which already contained income from these investments would lead to a highly distorted potential income figure. This would be especially true in the case of the 50-64 and the 65

and over age groups, where the income reported from these "other sources" was high. It made up 18 percent of the total estimated income in the case of the 50-64 age group and 38 percent of this total for the 65 and over age group. It was not possible to tell by the responses of the subjects whether the income from investments was considered annual income or remained in the investment increasing its value. This too, would result in error in potential income.

Still another source of error within this general category is the fact that not all respondents would have determined this income in the same way. In order to keep this distortion to the smallest amount possible, the income that was received from the "other sources" was not included in the potential income. The amount received from this source by persons in each separate estimated income category was subtracted from the total estimated income for each category. Thus, the modified estimated income was used in determining the potential income and in the tables comparing estimated and potential incomes. This modified estimated income was made up of only six sources consisting of; university pensions, TIAA-CREF, Social Security, Civil Service, State of Michigan retirement, and royalties and patents.

While this procedure will not do away with all error it is hoped that it will reduce it to a minimum by treating all respondents in a consistent manner and in this way give an accurate relative relationship between the estimated income and the potential income. Consequently, more realistic

comparisons can be made between and among the four age groups in looking at the results of financial planning for retirement.

All age groups were combined and the six estimated income categories were reduced to two to provide the best test of the hypotheses. The two new estimated income categories were made up of expected incomes of from \$0 to \$5999 and from \$6000 to \$10,000 and over. This handling of the data resulted in an adequate number of respondents in each category to obtain an accurate statistical test. The Chi-square test was used to test the hypotheses for statistical significance. A one percent level of significance was accepted as supporting the hypotheses.

To obtain the distribution of sources of expected retirement income for testing hypothesis one, the number of sources making up this income, with the exception of the "other sources" category, were added to the number of investment sources for each respondent. The "other sources" category was not included in order to avoid duplication. The respondents were then sorted as to whether they had less than five or more sources of expected retirement income.

The data for constructing the tables for testing hypothesis two were taken from the machine made tables concerned with the variable dollar sources of retirement income. The cells were combined to give the selected classification.

CHAPTER IV

FINDINGS AND ANALYSIS

In this chapter the findings, classified by the four age groups, are discussed and analyzed. The sources of estimated income are analyzed and where possible comparisons are made with findings reported by the 1963 Survey of the Aged. This survey refers to the actual sources of retirement income for the aged, as of 1962. The individual retirement plans which consist of the investments made by the individual are analyzed and projected at an annual yield of four percent per year in order to look at the potential supplemental retirement income this financial preparation for retirement represents. For comparing the assets of the persons in this study with the persons of retirement age in the general population, data from the 1960 Survey of Consumers Finances and from the 1959 Federal Reserve Survey of Consumers Finances will be used. These too, deal with the actual assets held by the aged as of these dates.

Under 40 Age Group

The smallest number of respondents, 16, were in the under 40 age group. All of these persons reported estimated incomes at retirement of less than \$8000 per year. Tables 1-5 show the five sources of estimated income reported by this group and the

TABLE 1. Income Expected From University Pensions by Estimated Income Categories.
Age under 40

Estimated Income	None	Under \$500	\$501- \$1000	\$1001- \$1500	\$1501- \$2000	\$2001- \$3000	TOTAL
\$0- \$1999	9	-	-	-	-	-	9
\$2000- \$3999	-	-	1	-	-	1	2
\$4000- \$5999	2	-	-	-	-	-	2
\$6000- \$7999	3	-	-	-	-	-	3
\$8000- \$9999	-	-	-	-	-	-	-
\$10,000 and over	-	-	-	-	-	-	-
TOTAL	14	-	1	-	-	1	16

TABLE 2. Income Expected From TIAA-CREF Pensions by Estimated Income Categories. Age under 40

Estimated Income	None	Under \$500	\$501- \$1000	\$1001- \$1500	\$1501- \$2000	\$2001- \$3000	\$3001- \$4000	\$4001- \$5000	\$5001- \$6000	\$6001 and over	TOTAL
\$0- \$1999	9	-	-	-	-	-	-	-	-	0	9
\$2000- \$3999	1	-	-	1	-	-	-	-	-	2	2
\$4000- \$5999	-	-	-	-	-	-	-	1	1	-	2
\$6000- \$7999	-	-	-	-	-	-	-	1	-	2	3
\$8000- \$9999	-	-	-	-	-	-	-	-	-	-	-
\$10,000 and over	-	-	-	-	-	-	-	-	-	-	-
TOTAL	10	-	-	1	-	-	-	2	1	2	16

TABLE 3. Income Expected From Social Security Benefits by Estimated Income Categories.
Age under 40

Estimated Income	None	Under \$500	\$501- \$1000	\$1001- \$1500	\$1501- \$2000	\$2001- \$3000	TOTAL
\$0- \$1999	9	-	-	-	-	-	9
\$2000- \$3999	1	-	-	-	-	1	2
\$4000- \$5999	-	-	-	-	2	-	2
\$6000- \$7999	-	-	-	-	2	1	3
\$8000- \$9999	-	-	-	-	-	-	-
\$10,000 and over	-	-	-	-	-	-	-
TOTAL	10	-	-	-	4	2	16

TABLE 4. Income Expected From Civil Service by Estimated Income Categories. Age under 40

Estimated Income	None	Under \$500	\$501- \$1000	\$1001- \$1500	\$1501- \$2000	\$2001- \$3000	\$3001- \$4000	\$4001- \$5000	\$5001- \$6000	\$6001 and over	TOTAL
\$0- \$1999	9	-	-	-	-	-	-	-	-	-	9
\$2000- \$3999	1	-	-	-	-	1	-	-	-	-	2
\$4000- \$5999	2	-	-	-	-	-	-	-	-	-	2
\$6000- \$7999	3	-	-	-	-	-	-	-	-	-	3
\$8000- \$9999	-	-	-	-	-	-	-	-	-	-	-
\$10,000 and over	-	-	-	-	-	-	-	-	-	-	-
TOTAL	15	-	-	-	-	1	-	-	-	-	16

TABLE 5. Income Expected From Other Sources by Estimated Income Categories.
Age under 40

Estimated Income	None	Under \$500	\$501- \$1000	\$1001- \$1500	\$1501- \$2000	\$2001- \$3000	\$3001- \$4000	\$4001- \$5000	\$5001- \$6000	\$6001 and over	TOTAL
\$0- \$1999	8	-	1	-	-	-	-	-	-	-	9
\$2000- \$3999	2	-	-	-	-	-	-	-	-	-	2
\$4000- \$5999	1	-	-	1	-	-	-	-	-	-	2
\$6000- \$7999	2	-	-	-	1	-	-	-	-	-	3
\$8000- \$9999	-	-	-	-	-	-	-	-	-	-	-
\$10,000 and over	-	-	-	-	-	-	-	-	-	-	-
TOTAL	13	-	1	1	1	-	-	-	-	-	16

amounts expected from each source. An analysis of these findings shows that the expected return from Social Security benefits, as a percent of the total estimated retirement income, is somewhat less than that received by the persons of retirement age in the population as a whole. The 1963 Survey of the Aged found Social Security making up 30 percent of the total retirement income (15) while these 16 respondents expected about 25 percent of their total estimated retirement income to come from Social Security benefits.

However, in looking at this source on an individual basis, a different picture emerges. Only six persons out of the total of 16 reported expecting any return from Social Security, this is an extremely small percentage. Logically all such persons should expect some return from this source upon retirement.

The private pension analysis also shows that only a few of the 16 persons in this group will benefit from this source of income at the time of retirement. Two persons reported expecting a return from university pensions and six persons from TIAA-CREF. While most of the retirement income expected by this group as a whole came from private pensions, only half of the group shared in this benefit.

One person reported an expected retirement income from Civil Service. None of the group expected retirement benefits from the State of Michigan or payments from royalties and patents. Three persons reported expected retirement income from "other sources."

In the area of investment assets, four persons reported a cash value of life insurance at more than \$5000, three persons reported owning stocks and bonds in amounts of more than \$5000, and four persons reported savings of more than that amount. A mean of the investments of this group produced a highly distorted picture since one individual reported a very high investment in each of the three types of investments. This significantly raised the mean as all of the other amounts reported were in the lower range. Tables 6-8 show the amounts invested by the individuals in this age group by estimated income categories.

One-half of the subjects reported no real estate holdings. Six reported holdings averaging \$20,000 in value and the two remaining subjects had holdings averaging \$40,000 in value. These two persons were both in the \$6000-\$7999 estimated retirement income category. Table 9 shows this investment for each estimated income category by the value of the real estate owned.

Looking at the investments in relation to the estimated income category shows that the persons at the \$6000-\$7999 income level own slightly more assets than those at any other single income level. Three persons in this group own real estate as compared to two persons in any other single level, three report life insurance, two report savings, and two report stocks and bond holdings as compared to one for each of these assets at a lower estimated income level. These figures assume an investment from \$0-\$5000 as a \$0 investment.

TABLE 6. Cash Value of Life Insurance (in thousands) by Estimated Income Categories.
Age under 40

Estimated Income	\$0- \$5	\$5- \$10	\$10- \$15	\$15- \$20	\$20- \$25	\$25- \$30	\$30- \$35	\$35- \$40	\$40- \$50	\$50 \$50	TOTAL
\$0- \$1999	8	-	-	-	-	1	-	-	-	-	9
\$2000- \$3999	2	-	-	-	-	-	-	-	-	-	2
\$4000- \$5999	2	-	-	-	-	-	-	-	-	-	2
\$6000- \$7999	-	-	1	-	1	-	-	-	-	1	3
\$8000- \$9999	-	-	-	-	-	-	-	-	-	-	-
\$10,000 and over	-	-	-	-	-	-	-	-	-	-	-
TOTAL	12	-	1	-	1	1	-	-	-	1	16

TABLE 7. Cash Value of Stocks and Bonds (in thousands) by Estimated Income Categories.
Age under 40

Estimated Income	\$0- \$5	\$5- \$10	\$10- \$15	\$15- \$20	\$20- \$25	\$25- \$30	\$30- \$35	\$35- \$40	\$40- \$50	\$50 \$50	TOTAL
\$0- \$1999	9	-	-	-	-	-	-	-	-	-	9
\$2000- \$3999	1	-	-	-	-	-	1	-	-	-	2
\$4000- \$5999	2	-	-	-	-	-	-	-	-	-	2
\$6000- \$7999	1	-	1	-	-	-	-	-	-	1	3
\$8000- \$9999	-	-	-	-	-	-	-	-	-	-	-
\$10,000 and over	-	-	-	-	-	-	-	-	-	-	-
TOTAL	13	-	1	-	-	-	1	-	-	1	16

TABLE 8. Cash Value of Savings (in thousands) by Estimated Income Categories.
Age under 40

Estimated Income	\$0- \$5	\$5- \$10	\$10- \$15	\$15- \$20	\$20- \$25	\$25- \$30	\$30- \$35	\$35- \$40	\$40- \$50	\$50 \$50	TOTAL
\$0- \$1999	9	-	-	-	-	-	-	-	-	-	9
\$2000- \$3999	1	-	-	-	-	-	-	-	-	1	2
\$4000- \$5999	1	1	-	-	-	-	-	-	-	-	2
\$6000- \$7999	1	1	-	-	-	1	-	-	-	-	3
\$8000- \$9999	-	-	-	-	-	-	-	-	-	-	-
\$10,000 and over	-	-	-	-	-	-	-	-	-	-	-
TOTAL	12	2	-	-	-	1	-	-	-	1	16

TABLE 9. Cash Value of Real Estate (in thousands) by Estimated Income Categories.
Age under 40

Estimated Income	\$0- \$5	\$5- \$10	\$10- \$15	\$15- \$20	\$20- \$25	\$25- \$30	\$30- \$35	\$35- \$40	\$40- \$50	\$50 TOTAL
\$0- \$1999	7	-	-	1	1	-	-	-	-	9
\$2000- \$3999	1	-	-	-	1	-	-	-	-	2
\$4000- \$5999	-	-	-	1	1	-	-	-	-	2
\$6000- \$7999	-	-	-	1	-	-	1	-	-	3
\$8000- \$9999	-	-	-	-	-	-	-	-	-	-
\$10,000 and over	-	-	-	-	-	-	-	-	-	-
TOTAL	8	-	-	3	3	-	1	-	-	16

One subject in the under 40 age group reported owning a trust fund of over \$5000 in value. The personal property held by this age group amounted to an average of \$7188 per person.

40-49 Age Group

The 40-49 age group contained 43 subjects. There were respondents in each of the six estimated retirement income categories. Tables 10-16 show each of the seven sources of estimated income. They indicate the number of persons in each estimated income category by the expected amounts from each source. The percent of aggregate income for each estimated income category derived from each of the seven sources of retirement income is shown in Table 17.

Here too, the findings are consistent with other research(15) in that Social Security is a major factor in the makeup of retirement income. However, it is evident for this age group that as the income increases, Social Security as a source of retirement income becomes less important and, for these persons, income from TIAA-CREF becomes the major source of estimated retirement income. Out of the total of 43 subjects, 26 were expecting retirement income from TIAA-CREF and 21 were expecting retirement income from university pensions. While it is obvious that some subjects will receive retirement income from both sources, it seems likely that most, if not all, of these subjects would be covered by some type of private pension. This fact puts them in a more favorable position than that of the persons of retirement age in the 1963 Survey which reported

**TABLE 10. Income Expected From University Pensions by Estimated Income Categories.
Age 40-49 Years**

Estimated Income	None	Under \$500	\$501- \$1000	\$1001- \$1500	\$1501- \$2000	\$2001- \$3000	TOTAL
\$0- \$1999	4	2	-	-	-	-	6
\$2000- \$3999	4	1	-	1	-	3	9
\$4000- \$5999	2	-	-	-	-	-	2
\$6000- \$7999	4	-	2	1	2	-	9
\$8000- \$9999	4	2	1	1	1	-	9
\$10,000 and over	4	2	1	-	-	1	8
TOTAL	22	7	4	3	3	4	43

TABLE 11. Income Expected From TIAA-CREF Pensions by Estimated Income Categories. Age 40-49 Years

Estimated Income	None	Under \$500	\$501- \$1000	\$1001- \$1500	\$1501- \$2000	\$2001- \$3000	\$3001- \$4000	\$4001- \$5000	\$5001- \$6000	\$6001 and over	TOTAL
\$0- \$1999	6	-	-	-	-	-	-	-	-	-	6
\$2000- \$3999	8	-	1	-	-	-	-	-	-	-	9
\$4000- \$5999	-	-	-	-	-	-	2	-	-	-	2
\$6000- \$7999	2	-	-	-	1	1	3	1	-	1	9
\$8000- \$9999	1	-	-	-	1	-	-	1	2	4	9
\$10,000 and over	-	-	-	-	-	2	-	-	1	5	8
TOTAL	17	-	1	-	2	3	5	2	3	10	43

TABLE 12. Income Expected From Social Security Benefits by Estimated Income Categories.
Age 40-49 Years

Estimated Income	Age 40-49 Years						TOTAL
	None	Under \$500	\$501- \$1000	\$1001- \$1500	\$1501- \$2000	\$2001- \$3000	
\$0- \$1999	4	1	-	1	-	-	6
\$2000- \$3999	2	-	2	2	1	2	9
\$4000- \$5999	-	-	-	-	2	-	2
\$6000- \$7999	1	1	-	2	1	4	9
\$8000- \$9999	1	-	-	-	4	4	9
\$10,000 and over	2	-	-	-	3	3	8
TOTAL	10	2	2	5	11	13	43

TABLE 13. Income Expected From Civil Service by Estimated Income Categories. Age 40-49 Years

Estimated Income	None	Under \$500	\$501- \$1000	\$1001- \$1500	\$1501- \$2000	\$2001- \$3000	\$3001- \$4000	\$4001- \$5000	\$5001- \$6000	\$6001 and over	TOTAL
\$0- \$1999	6	-	-	-	-	-	-	-	-	-	6
\$2000- \$3999	9	-	-	-	-	-	-	-	-	-	9
\$4000- \$5999	2	-	-	-	-	-	-	-	-	-	2
\$6000- \$7999	6	-	-	1	-	1	1	-	-	-	9
\$8000- \$9999	8	-	-	-	-	-	-	-	-	1	9
\$10,000 and over	5	-	1	1	-	1	-	-	-	-	8
TOTAL	36	-	1	2	-	2	1	-	-	1	43

TABLE 14. Income Expected From State of Michigan by Estimated Income Categories. Age 40-49 Years

Estimated Income	None	Under \$500	\$501- \$1000	\$1001- \$1500	\$1501- \$2000	\$2001- \$3000	\$3001- \$4000	\$4001- \$5000	\$5001- \$6000	\$6001 and over	TOTAL
\$0- \$1999	6	-	-	-	-	-	-	-	-	-	6
\$2000- \$3999	8	-	-	1	-	-	-	-	-	-	9
\$4000- \$5999	2	-	-	-	-	-	-	-	-	-	2
\$6000- \$7999	8	1	-	-	-	-	-	-	-	-	9
\$8000- \$9999	9	-	-	-	-	-	-	-	-	-	9
\$10,000 and over	6	-	-	-	-	1	-	-	-	1	8
TOTAL	39	1	-	1	-	1	-	-	-	1	43

TABLE 15. Income Expected From Royalties and Patent by Estimated Income Categories.
Age 40-49 Years

Estimated Income	None	Under \$500	\$501- \$1000	\$1001- \$1500	\$1501- \$2000	\$2001- \$3000	\$3001- \$4000	\$4001- \$5000	\$5001- \$6000	\$6001 and over	TOTAL
\$0- \$1999	6	-	-	-	-	-	-	-	-	-	6
\$2000- \$3999	9	-	-	-	-	-	-	-	-	-	9
\$4000- \$5999	2	-	-	-	-	-	-	-	-	-	2
\$6000- \$7999	8	1	-	-	-	-	-	-	-	-	9
\$8000- \$9999	7	2	-	-	-	-	-	-	-	-	9
\$10,000 and over	3	1	-	1	1	1	1	-	-	-	8
TOTAL	35	4	-	1	1	1	1	-	-	-	43

TABLE 16. Income Expected From Other Sources by Estimated Income Categories.
Age 40-49 Years

Estimated Income	None	Under \$500	\$501- \$1000	\$1001- \$1500	\$1501- \$2000	\$2001- \$3000	\$3001- \$4000	\$4001- \$5000	\$5001- \$6000	\$6001 and over	TOTAL
\$0- \$1999	5	-	1	-	-	-	-	-	-	-	6
\$2000- \$3999	3	1	2	2	-	1	-	-	-	-	9
\$4000- \$5999	2	-	-	-	-	-	-	-	-	-	2
\$6000- \$7999	3	1	2	1	1	-	1	-	-	-	9
\$8000- \$9999	3	2	1	1	-	1	-	1	-	-	9
\$10,000 and over	2	-	2	1	-	1	1	-	1	-	8
TOTAL	18	4	8	5	1	3	2	1	1	-	43

**TABLE 17. Break-down of Aggregate Estimated Retirement Income by Percentages.
Age 40-49 Years**

Estimated Income	University Pension	TIAA- CRF	Social Security	Civil Service	State of Michigan	Royalties Patents	Other Sources
\$0- \$1999	18	0	55	0	0	0	27
\$2000- \$3999	24.4	2	46	0	0	0	26
\$4000- \$5999	0	66	34	0	0	0	0
\$6000- \$7999	10.2	41.5	23.5	11.8	4.1	4.1	12.2
\$8000- \$9999	6.8	49	21	7	0	.8	15.4
\$10,000 and over	3.9	43	13	4.4	9	9.9	14.1

that only about three percent of all retirees could look forward to private pensions as a type of retirement income.(15) The 26 persons expecting retirement income from TIAA-CREF are in an especially favorable position since CREF is a variable dollar pension providing an automatic hedge against inflation.

These persons can also expect substantial retirement income from investments. Tables 18-20 show each of the three types of investments that make up sources of potential retirement income. They indicate the number of persons in each estimated retirement income category by the amount invested in each particular asset. The tables show a trend toward more types of investments and larger investments as the estimated retirement income increases.

A larger number of this age category had invested in life insurance than in the other two types of investments. This is similar to earlier studies as this form of saving seems a popular one for all spending units and an especially important form of saving for those units under retirement age.(34)

Investments in stocks and bonds and in savings show a striking similarity in both the number of persons and the amounts involved. The general investment pattern is consistent with previous research findings in that the lower expected income categories have few assets(9, p.248) In the two lowest expected income categories only two persons had savings of over \$5000, three persons owned stocks and bonds worth \$5000 or more, and six persons owned life insurance policies with a cash value of over \$5000.

TABLE 18. Cash Value of Life Insurance (in thousands) by Estimated Income Categories.
Age 40-49 Years

Estimated Income	\$0- \$5	\$5- \$10	\$10- \$15	\$15- \$20	\$20- \$25	\$25- \$30	\$30- \$35	\$35- \$40	\$40- \$50	\$50 TOTAL
\$0- \$1999	2	1	2	-	-	-	1	-	-	6
\$2000- \$3999	7	2	-	-	-	-	-	-	-	9
\$4000- \$5999	-	-	1	1	-	-	-	-	-	2
\$6000- \$7999	1	4	-	2	1	-	-	-	1	9
\$8000- \$9999	5	2	1	-	-	-	-	1	-	9
\$10,000 and over	1	3	2	-	-	1	-	1	-	8
TOTAL	16	12	6	3	1	1	-	3	1	43

TABLE 19. Cash Value of Stocks and Bonds (in thousands) by Estimated Income Categories.
Age 40-49 Years

Estimated Income	\$0- \$5	\$5- \$10	\$10- \$15	\$15- \$20	\$20- \$25	\$25- \$30	\$30- \$35	\$35- \$40	\$40- \$50	\$50 \$50	TOTAL
\$0- \$1999	5	-	1	-	-	-	-	-	-	-	6
\$2000- \$3999	7	-	-	-	-	2	-	-	-	-	9
\$4000- \$5999	2	-	-	-	-	-	-	-	-	-	2
\$6000- \$7999	6	1	-	1	1	-	-	-	-	-	9
\$8000- \$9999	5	3	-	1	-	-	-	-	-	-	9
\$10,000 and over	4	3	1	-	-	-	-	-	-	-	8
TOTAL	29	7	2	2	1	2	-	-	-	-	43

TABLE 20. Cash Value of Savings (in thousands) by Estimated Income Categories.
Age 40-49 Years

Estimated Income	\$0- \$5	\$5- \$10	\$10- \$15	\$15- \$20	\$20- \$25	\$25- \$30	\$30- \$35	\$35- \$40	\$40- \$50	\$50 TOTAL
\$0- \$1999	6	-	-	-	-	-	-	-	-	6
\$2000- \$3999	7	-	1	-	1	-	-	-	-	9
\$4000- \$5999	1	1	-	-	-	-	-	-	-	2
\$6000- \$7999	5	2	1	-	-	1	-	-	-	9
\$8000- \$9999	5	3	1	-	-	-	-	-	-	9
\$10,000 and over	3	3	1	-	-	1	-	-	-	8
TOTAL	27	9	4	-	1	2	-	-	-	43

Sixty-three percent of all subjects in the 40-49 age group had invested in life insurance. Nearly 33 percent own stocks and bonds and over 37 percent have savings. It is important to note that many investments (stocks and bonds, real estate, etc.) for this age group, which has an average of twenty years left before retirement, have a great potential for growth. Investment planning at this age provides more flexibility in building an estate than is the case for the older groups.

The real estate holdings show a trend much like that of the investments. The percentage of persons owning homes and the value of these homes show an increase as the expected income increases. Eighty-one percent of the persons in this age group reported real estate holdings of over \$5000. This is much higher than the 65 percent national average found by the 1960 Survey of Consumer Finances for persons of this age. (5, p.72)

The real estate holdings are shown in Table 21. The number of persons in each expected income category is indicated by the value of the real estate owned. Four persons in this group reported having investments in trusts of over \$5000, the mean value of which was \$16,900. The value of the personal property reported by the 43 subjects in this age group averaged \$6162 per person.

TABLE 21. Cash Value of Real Estate (in thousands) by Estimated Income Categories.
Age 40-49 Years

Estimated Income	\$0- \$5	\$5- \$10	\$10- \$15	\$15- \$20	\$20- \$25	\$25- \$30	\$30- \$35	\$35- \$40	\$40- \$50	\$50 TOTAL
\$0- \$1999	2	-	1	1	2	-	-	-	-	6
\$2000- \$3999	2	2	3	1	-	-	-	-	-	9
\$4000- \$5999	-	-	-	2	-	-	-	-	-	2
\$6000- \$7999	1	1	1	-	2	1	2	-	1	9
\$8000- \$9999	1	1	-	1	-	4	1	1	-	9
\$10,000 and over	2	-	-	1	-	3	-	-	-	8
TOTAL	8	4	5	6	4	8	3	1	1	43

50-64 Age Group

There were 204 respondents in the 50-64 age category with subjects in each of the six estimated income categories. Tables 22-28 show the sources of income by estimated income category and the expected amount from each of the seven sources for the persons in this age group. Table 29 shows the percent of aggregate income coming from each of the seven sources for each estimated income category.

The findings for this age group are similar to those of the 40-49 age group in that Social Security makes up a decreasing proportion of the estimated income as the expected income level rises and that the percent expected from the private pensions increases and makes up the major portion of retirement income. However, for this age group, with the exception of the lowest estimated income category, the sources of income are more widely represented. Except for the lowest category, all seven types of income are represented in all income levels.

Here too, most of the respondents were expecting income from private pensions. Income from university pensions was expected by 143 persons of the 204 total, and 112 expected to receive benefits from TIAA-CREF at retirement providing the added security of a hedge against inflation. There was duplication here, but it seems likely that the vast majority of the persons in this age group would receive retirement income in the form of private pensions, placing them in a

TABLE 22. Income Expected From University Pensions by Estimated Income Categories.
Age 50-64 Years

Estimated Income	None	Under \$500	\$501- \$1000	\$1001- \$1500	\$1501- \$2000	\$2001- \$3000	TOTAL
\$0- \$1999	13	1	1	-	-	-	15
\$2000- \$3999	11	3	4	9	2	9	38
\$4000- \$5999	6	-	2	5	3	22	38
\$6000- \$7999	16	2	3	6	5	12	44
\$8000- \$9999	9	4	1	3	1	10	28
\$10,000 and over	6	3	3	1	5	18	41
TOTAL	61	13	14	24	16	71	204

TABLE 23. Income Expected From TIAA-CREF Pensions by Estimated Income Categories. Age 50-64 Years

Estimated Income	None	Under \$500	\$501- \$1000	\$1001- \$1500	\$1501- \$2000	\$2001- \$3000	\$3001- \$4000	\$4001- \$5000	\$5001- \$6000	\$6001 and over	TOTAL
\$0-											
\$1999	15	-	-	-	-	-	-	-	-	-	15
\$2000-											
\$3999	32	2	1	2	-	-	1	-	-	-	38
\$4000-											
\$5999	24	4	2	5	3	-	-	-	-	-	38
\$6000-											
\$7999	15	1	4	1	6	11	3	1	2	-	44
\$8000-											
\$9999	6	1	-	-	4	3	3	2	4	5	28
\$10,000 and over	-	2	3	1	2	5	6	3	6	13	41
TOTAL	92	10	10	9	15	19	13	6	12	18	204

TABLE 24. Income Expected From Social Security Benefits by Estimated Income Categories.
Age 50-64 Years

Estimated Income	None	Under \$500	\$501- \$1000	\$1001- \$1500	\$1501- \$2000	\$2001- \$3000	TOTAL
\$0-							
\$1999	8	2	3	2	-	-	15
\$2000-							
\$3999	9	-	2	20	3	4	38
\$4000-							
\$5999	3	1	2	14	9	9	38
\$6000-							
\$7999	11	-	-	8	16	9	44
\$8000-							
\$9999	4	-	3	5	5	11	28
\$10,000 and over	7	-	2	2	3	27	41
TOTAL	42	3	12	51	36	60	204

TABLE 25. Income Expected From Civil Service by Estimated Income Categories. Age 50-64 Years

Estimated Income	None	Under \$500	\$501- \$1000	\$1001- \$1500	\$1501- \$2000	\$2001- \$3000	\$3001- \$4000	\$4001- \$5000	\$5001- \$6000	\$6001 and over	TOTAL
\$0-											
\$1999	15	-	-	-	-	-	-	-	-	-	15
\$2000-											
\$3999	36	-	2	-	-	-	-	-	-	-	38
\$4000-											
\$5999	35	-	-	-	-	2	1	-	-	-	38
\$6000-											
\$7999	35	-	-	1	-	3	3	1	-	1	44
\$8000-											
\$9999	23	-	-	1	-	-	1	1	-	2	28
\$10,000 and over	31	-	-	1	-	2	2	-	-	5	41
TOTAL	175	-	2	3	-	7	7	2	-	8	204

TABLE 26. Income Expected From State of Michigan by Estimated Income Categories. Age 50-64 Years

Estimated Income	None	Under \$500	\$501- \$1000	\$1001- \$1500	\$1501- \$2000	\$2001- \$3000	\$3001- \$4000	\$4001- \$5000	\$5001- \$6000	\$6001 and over	TOTAL
\$0- \$1999	15	-	-	-	-	-	-	-	-	-	15
\$2000- \$3999	35	1	1	1	-	-	-	-	-	-	38
\$4000- \$5999	35	2	-	-	-	-	1	-	-	-	38
\$6000- \$7999	35	1	1	2	2	1	1	-	1	-	44
\$8000- \$9999	25	-	-	-	2	-	1	-	-	-	28
\$10,000 and over	32	-	1	-	1	3	1	-	1	2	41
TOTAL	177	4	3	3	5	4	4	-	2	2	204

TABLE 27. Income Expected From Royalties and Patents by Estimated Income Categories.
Age 50-64 Years

Estimated Income	None	Under \$500	\$501- \$1000	\$1001- \$1500	\$1501- \$2000	\$2001- \$3000	\$3001- \$4000	\$4001- \$5000	\$5001- \$6000	\$6001 and over	TOTAL
\$0- \$1999	15	-	-	-	-	-	-	-	-	-	15
\$2000- \$3999	36	2	-	-	-	-	-	-	-	-	38
\$4000- \$5999	34	3	1	-	-	-	-	-	-	-	38
\$6000- \$7999	38	2	3	1	-	-	-	-	-	-	44
\$8000- \$9999	22	2	1	2	-	1	-	-	-	-	28
\$10,000 and over	28	5	3	2	1	1	1	-	-	-	41
TOTAL	173	14	8	5	1	2	1	-	-	-	204

TABLE 28. Income Expected From Other Sources by Estimated Income Categories.
Age 50-64 Years

Estimated Income	None	Under \$500	\$501- \$1000	\$1001- \$1500	\$1501- \$2000	\$2001- \$3000	\$3001- \$4000	\$4001- \$5000	\$5001- \$6000	\$6001 and over	TOTAL
\$0-											
\$1999	10	3	1	-	1	-	-	-	-	-	15
\$2000-											
\$3999	18	5	9	3	2	1	-	-	-	-	38
\$4000-											
\$5999	10	6	6	9	1	4	2	-	-	-	38
\$6000-											
\$7999	13	7	4	4	3	5	3	-	-	5	44
\$8000-											
\$9999	9	3	-	3	4	4	-	2	-	3	28
\$10,000 and over	6	4	6	4	5	6	2	2	2	4	41
TOTAL	66	28	26	23	16	20	7	4	2	12	204

TABLE 29. Break-down of Aggregate Estimated Retirement Income by Percentages.
Age 50-64 Years

Estimated Income	University Pension	TIAA- CRIF	Social Security	Civil Service	State of Michigan	Royalties Patents	Other Sources
\$0- \$1999	10.4	0	55.4	0	0	0	34.2
\$2000- \$3999	36.3	6.5	37	1.5	2.2	.5	16
\$4000- \$5999	36	6	30.2	4.5	1.1	.2	22
\$6000- \$7999	15.9	22	22	10	7	3.1	20
\$8000- \$9999	13	34.8	18.8	8.5	2.8	2.5	19.6
\$10,000 and over	12	35.6	14.8	9.4	6.7	3	18.5

superior retirement position when compared with the persons of retirement age in the general population. The 1963 Survey found only three percent of the aged receiving any income from private pensions.

The average percent of income expected from Social Security was 29.4, very close to the 30 percent reported by the 1963 Survey for all persons 65 or over.(15) Nearly 14 percent of this age group were expecting retirement income from Civil Service and another 14 percent were expecting retirement income from the State of Michigan. Fifteen percent of this group of persons were expecting income from royalties and patents at the time of retirement, although for most the amounts expected were small.

The expected income from other sources became increasingly important in this 50-64 age group, with more than 67 percent listing this as a source of retirement income, many in substantial amounts. This category would no doubt contain income from the investment sources used in the study, but also may contain other types of income such as rents, interest from money loaned, or from investments other than bonds or savings.

The three types of investments that make up the sources of potential retirement income are shown in Tables 30-32. They indicate the number of persons in each estimated income category by the amount invested in each asset. It is evident from these tables that the trend toward more and higher investment by those in the higher income categories is continuing.

TABLE 30. Cash Value of Life Insurance (in thousands) by Estimated Income Categories.
Age 50-64 Years

Estimated Income	\$0- \$5	\$5- \$10	\$10- \$15	\$15- \$20	\$20- \$25	\$25- \$30	\$30- \$35	\$35- \$40	\$40- \$50	\$50 \$50	TOTAL
\$0- \$1999	14	-	-	1	-	-	-	-	-	-	15
\$2000- \$3999	22	6	5	4	-	-	1	-	-	-	38
\$4000- \$5999	18	14	1	3	1	1	-	-	-	-	38
\$6000- \$7999	19	13	4	2	4	-	1	1	-	-	44
\$8000- \$9999	7	6	4	3	2	2	1	-	1	2	28
\$10,000 and over	5	11	14	1	4	2	-	-	2	2	41
TOTAL	85	50	28	14	11	5	3	1	3	4	204

TABLE 31. Cash Value of Stock and Bonds (in thousands) by Estimated Income Categories.
Age 50-64 Years

Estimated Income	\$0- \$5	\$5- \$10	\$10- \$15	\$15- \$20	\$20- \$25	\$25- \$30	\$30- \$35	\$35- \$40	\$40- \$50	\$50 TOTAL
\$0- \$1999	13	2	-	-	-	-	-	-	-	15
\$2000- \$3999	27	6	2	-	2	1	-	-	-	38
\$4000- \$5999	26	8	1	-	1	-	-	1	-	38
\$6000- \$7999	27	6	4	1	-	1	1	-	-	44
\$8000- \$9999	15	5	2	-	1	1	-	-	1	28
\$10,000 and over 21	21	2	1	4	2	1	2	-	-	41
TOTAL	129	29	10	5	6	4	3	1	1	204

TABLE 32. Cash Value of Savings (in thousands) by Estimated Income Categories.
Age 50-64 Years

Estimated Income	\$0- \$5	\$5- \$10	\$10- \$15	\$15- \$20	\$20- \$25	\$25- \$30	\$30- \$35	\$35- \$40	\$40- \$50	\$50	TOTAL
\$0- \$1999	7	3	2	1	1	-	-	-	-	1	15
\$2000- \$3999	25	6	3	1	2	1	-	-	-	-	38
\$4000- \$5999	19	9	4	1	2	1	1	-	1	-	38
\$6000- \$7999	17	14	7	1	-	2	1	1	1	-	44
\$8000- \$9999	12	6	5	1	3	-	-	1	-	-	28
\$10,000 and over	9	17	2	3	5	1	1	1	1	1	41
TOTAL	89	55	23	8	13	5	3	3	3	2	204

In this age group, as in the previous age group, life insurance was the most common investment; however, the number of subjects with savings accounts was very close to the number with life insurance. Of the 119 persons with life insurance with cash values in the over \$5000 category, less than 25 percent had policies valued at over \$20,000. One hundred fifteen persons reported savings above the \$0 to \$5000 category. Twenty-nine percent reported having over \$15,000 invested in a savings account. Sixty percent of the subjects reported owning stocks and bonds valued at over \$5000.

In this age group there was a slight increase in the number in the lower estimated income categories having investments compared with the previous age groups. Forty-six percent of the subjects in the two lowest estimated income groups reported having savings and the amounts were fairly widely distributed. Although these groups had far less than those with higher estimated income, this increase may well be due to the decreasing family expenses at this age so there is more discretionary income that can be used for investment purposes. It is obvious that most respondents in this study expected retirement incomes which are higher than those of the average retired person.

In discussing a retirement planning schedule, Joseph Buckley says that at age 55 the investor can afford to take more risk in his investment program since family responsibilities are normally less.(1, pp.73-78) A comparison of the

investments in stocks and bonds between the 40-49 age group and the 50-64 age group shows an increase of nearly five percent in the number of investors, but another interesting factor in this comparison is the increased amounts invested by the older group. Sixteen persons in the 50-64 group had over \$50,000 invested in stocks and bonds.

Table 33 shows the real estate holding for the 50-64 age group. Home ownership was widely distributed throughout all estimated income categories. Eighty-five percent of the subjects reported real estate holdings of over \$5000. The 1960 Survey of Consumer Finances reports home ownership for about 64 percent of this age group among the whole United States population. (5, p.72)

Twelve of the subjects in this age group had invested in trust accounts. All were valued at between \$5000 and \$10,000. The personal property reported by the 50-64 age group averaged \$8762 per person.

65 and Over Age Group

The 65 and over age group was made up of 140 subjects. There were respondents in each of the six estimated income categories. Tables 34-40 show the sources of income by estimated income category and the amounts expected from each source for the subjects in this age group.

The break-down of the aggregate income is shown in Table 41. This indicates the percent of the aggregate coming from each of the seven sources for each estimated income category.

TABLE 33. Cash Value of Real Estate (in thousands) by Estimated Income Categories.
Age 50-64 Years

Estimated Income	\$0- \$5	\$5- \$10	\$10- \$15	\$15- \$20	\$20- \$25	\$25- \$30	\$30- \$35	\$35- \$40	\$40- \$50	\$50	TOTAL
\$0- \$1999	3	3	2	4	2	-	-	1	-	-	15
\$2000- \$3999	9	2	5	3	6	4	2	-	5	2	38
\$4000- \$5999	6	-	3	11	4	5	2	4	2	1	38
\$6000- \$7999	7	2	2	7	9	7	2	3	1	4	44
\$8000- \$9999	1	-	1	4	6	6	3	-	5	2	28
\$10,000 and over	5	1	-	2	6	4	8	4	4	7	41
TOTAL	31	8	13	31	33	26	17	12	17	16	204

**TABLE 34. Income Expected From University Pensions by Estimated Income Categories.
Age 65 and over**

Estimated Income	None	Under \$500	\$501- \$1000	\$1001- \$1500	\$1501- \$2000	\$2001- \$3000	TOTAL
\$0- \$1999	5	-	2	1	-	-	8
\$2000- \$3999	11	-	1	2	5	4	23
\$4000- \$5999	3	-	1	4	5	10	23
\$6000- \$7999	1	-	3	2	1	26	33
\$8000- \$9999	-	-	-	3	3	23	29
\$10,000 and over	1	-	-	-	3	20	24
TOTAL	21	-	7	12	17	83	140

TABLE 35. Income Expected From TIAA-CREF Pensions by Estimated Income Categories. Age 65 and over

Estimated Income	None	Under \$500	\$501- \$1000	\$1001- \$1500	\$1501- \$2000	\$2001- \$3000	\$3001- \$4000	\$4001- \$5000	\$5001- \$6000	\$6001 and over	TOTAL
\$0- \$1999	7	1	-	-	-	-	-	-	-	-	8
\$2000- \$3999	19	1	-	1	2	-	-	-	-	-	23
\$4000- \$5999	17	3	2	-	1	-	-	-	-	-	23
\$6000- \$7999	18	5	5	2	-	2	1	-	-	-	33
\$8000- \$9999	9	1	6	4	3	3	2	1	-	-	29
\$10,000 and over 12	12	-	3	3	1	1	3	1	-	-	24
TOTAL	82	11	16	10	7	6	6	2	-	-	140

TABLE 36. Income Expected From Social Security Benefits by Estimated Income Categories.
Age 65 and over

Estimated Income	None	Under \$500	\$501- \$1000	\$1001- \$1500	\$1501- \$2000	\$2001- \$3000	TOTAL
\$0- \$1999	3	1	2	2	-	-	8
\$2000- \$3999	5	1	3	9	4	1	23
\$4000- \$5999	2	2	-	7	6	6	23
\$6000- \$7999	7	-	2	3	7	14	33
\$8000- \$9999	6	-	-	5	2	16	29
\$10,000 and over	4	-	-	4	7	9	24
TOTAL	27	4	7	30	26	46	140

TABLE 37. Income Expected From Civil Service by Estimated Income Categories. Age 65 and over

Estimated Income	None	Under \$500	\$501- \$1000	\$1001- \$1500	\$1501- \$2000	\$2001- \$3000	\$3001- \$4000	\$4001- \$5000	\$5001- \$6000	\$6001 and over	TOTAL
\$0- \$1999	8	-	-	-	-	-	-	-	-	-	8
\$2000- \$3999	21	-	-	1	-	1	-	-	-	-	23
\$4000- \$5999	22	-	-	-	-	1	-	-	-	-	23
\$6000- \$7999	23	-	2	1	-	-	5	2	-	-	33
\$8000- \$9999	21	-	-	-	-	1	-	7	-	-	29
\$10,000 and over 13	13	-	-	-	-	-	1	3	5	2	24
TOTAL	108	-	2	2	-	3	6	12	5	2	140

TABLE 38. Income Expected From State of Michigan by Estimated Income Categories. Age 65 and over

Estimated Income	None	Under \$500	\$501- \$1000	\$1001- \$1500	\$1501- \$2000	\$2001- \$3000	\$3001- \$4000	\$4001- \$5000	\$5001- \$6000	\$6001 and over	TOTAL
\$0- \$1999	8	-	-	-	-	-	-	-	-	-	8
\$2000- \$3999	20	-	1	2	-	-	-	-	-	-	23
\$4000- \$5999	23	-	-	-	-	-	-	-	-	-	23
\$6000- \$7999	29	1	-	1	2	-	-	-	-	-	33
\$8000- \$9999	28	-	-	-	-	1	-	-	-	-	29
\$10,000 and over	22	1	-	-	1	-	-	-	-	-	24
TOTAL	130	2	1	3	3	1	-	-	-	-	140

TABLE 39. Income Expected From Royalties and Patents by Estimated Income Categories.
Age 65 and over

Estimated Income	None	Under \$500	\$501- \$1000	\$1001- \$1500	\$1501- \$2000	\$2001- \$3000	\$3001- \$4000	\$4001- \$5000	\$5001- \$6000	\$6001 and over	TOTAL
\$0- \$1999	8	-	-	-	-	-	-	-	-	-	8
\$2000- \$3999	22	-	1	-	-	-	-	-	-	-	23
\$4000- \$5999	23	-	-	-	-	-	-	-	-	-	23
\$6000- \$7999	31	2	-	-	-	-	-	-	-	-	33
\$8000- \$9999	24	3	-	-	1	1	-	-	-	-	29
\$10,000 and over 18	3	3	-	1	-	1	-	-	-	1	24
TOTAL	126	8	1	1	1	2	-	-	-	1	140

TABLE 40. Income Expected From Other Sources by Estimated Income Categories.
Age 65 and over

Estimated Income	None	Under \$500	\$501- \$1000	\$1001- \$1500	\$1501- \$2000	\$2001- \$3000	\$3001- \$4000	\$4001- \$5000	\$5001- \$6000	\$6001 and over	TOTAL
\$0- \$1999	6	-	2	-	-	-	-	-	-	-	8
\$2000- \$3999	13	1	4	-	2	2	1	-	-	-	23
\$4000- \$5999	3	4	5	5	1	2	1	2	-	-	23
\$6000- \$7999	8	5	4	1	2	8	1	2	2	-	33
\$8000- \$9999	2	1	3	10	1	3	6	2	-	1	29
\$10,000 and over	1	-	-	1	1	3	2	3	5	8	24
TOTAL	33	11	18	17	7	18	11	9	7	9	140

TABLE 41. Break-down of Aggregate Estimated Retirement Income by Percentages.
Age 65 Years and over

Estimated Income	University Pension	TIAA- CRF	Social Security	Civil Service	State of Michigan	Royalties Patents	Other Sources
\$0- \$1999	32.9	3	46.7	0	0	0	17.7
\$2000- \$3999	38.5	6	28	4.5	3.9	.9	18.2
\$4000- \$5999	35	4.4	30.6	2.2	0	0	27.8
\$6000- \$7999	30.8	7	22.6	14.2	2.2	.2	23
\$8000- \$9999	26.5	13.4	19.7	13.4	1	2	24
\$10,000 and over	16.2	7.9	11.4	22.6	.6	3.2	38.1

For these persons, as with the other age group, Social Security makes up a smaller percentage of expected retirement income as the estimated income increases. The average amount expected from Social Security is 26 percent. This is lower than for the general population as found in the 1963 Survey of the Aged. The pattern does change for this group, with the university pension and other sources making up major sources of income for all estimated income categories. TIAA-CREF makes up a relatively small share of estimated income for this group. This age group was not in a favorable position with respect to inflation since the major portion of expected income would be a fixed income.

Out of 140 total, 119 persons reported income from university pensions and TIAA-CREF. While 83 of the university pension recipients reported amounts of \$2001 to \$3000, more than two-thirds of those expecting returns from TIAA-CREF were expecting \$1500 or less. So not only was there a smaller percentage of these persons involved in TIAA-CREF than was the case with younger groups, but the amount from this type of private pension was also considerably less for this age group.

Nearly 23 percent of these older persons expected retirement income from Civil Service pensions, with all but four reporting a minimum return of \$2000. Seven percent reported expected retirement income from State of Michigan pensions, but all except one of these were \$2000 or less. Ten percent expected retirement income from royalties and patents with

more than half of this number expecting under \$500.

The "other sources" category makes up one of the important sources for this age group with an average of 24.5 percent of the retirement income in each of the six estimated income categories. Here again the gains enjoyed by investment planning are obvious. Seventy-six percent of all persons in this age group were expecting this type of retirement income and more than half of these persons were expecting more than \$2000. The importance of this planning for retirement is self evident. In 1960, 36 percent of all families headed by a person 65 or over had a yearly income of under \$2000 and about 60 percent had incomes of less than \$3000.(4, p.87)

The three types of investments that made up the sources of potential retirement income are shown in Tables 42-44. They show the number of persons in each estimated income category by the amount invested in each type of asset.

With the exception of the trend of increasing investments with increasing estimated retirement incomes, this group shows a different pattern in investments than the other age groups. In both the 40-49 and 50-64 age groups more persons invested in life insurance than either of the other two types of assets. In this age group only 37 percent owned life insurance with a cash value of over \$5000 and only eleven persons owned policies with cash values of over \$15,000. Sixty-two percent of the persons in the 40-49 age group and 59 percent of the 50-64

TABLE 42. Cash Value of Life Insurance (in thousands) by Estimated Income Categories.
Age 65 and over

Estimated Income	\$0- \$5	\$5- \$10	\$10- \$15	\$15- \$20	\$20- \$25	\$25- \$30	\$30- \$35	\$35- \$40	\$40- \$50	\$50 TOTAL
\$0- \$1999	8	-	-	-	-	-	-	-	-	8
\$2000- \$3999	19	3	1	-	-	-	-	-	-	23
\$4000- \$5999	15	6	2	-	-	-	-	-	-	23
\$6000- \$7999	19	9	2	3	-	-	-	-	-	33
\$8000- \$9999	15	9	2	2	-	-	-	-	1	29
\$10,000 and over	12	6	1	4	1	-	-	-	-	24
TOTAL	88	33	8	9	1	-	-	-	1	140

TABLE 43. Cash Value of Stock and Bonds (in thousands) by Estimated Income Categories.
Age 65 and over

Estimated Income	\$0- \$5	\$5- \$10	\$10- \$15	\$15- \$20	\$20- \$25	\$25- \$30	\$30- \$35	\$35- \$40	\$40- \$50	\$50 TOTAL
\$0- \$1999	5	1	-	-	1	-	-	-	-	1 8
\$2000- \$3999	18	1	2	-	-	-	-	1	-	1 23
\$4000- \$5999	15	3	1	-	-	-	1	-	2	1 23
\$6000- \$7999	14	3	2	3	1	1	2	-	6	1 33
\$8000- \$9999	15	4	3	2	-	1	-	-	2	2 29
\$10,000 and over	4	-	2	3	2	1	-	-	2	10 24
TOTAL	71	12	10	8	4	3	3	1	12	16 140

TABLE 44. Cash Value of Savings (in thousands) by Estimated Income Categories.
Age 65 and over

Estimated Income	\$0- \$5	\$5- \$10	\$10- \$15	\$15- \$20	\$20- \$25	\$25- \$30	\$30- \$35	\$35- \$40	\$40- \$50	\$50 TOTAL
\$0- \$1999	4	2	-	1	-	-	1	-	-	8
\$2000- \$3999	11	6	-	1	2	1	1	-	1	23
\$4000- \$5999	11	5	3	3	-	-	-	-	-	23
\$6000- \$7999	12	7	2	3	3	1	1	-	2	33
\$8000- \$9999	5	9	2	3	4	2	-	-	4	29
\$10,000 and over	3	1	3	1	3	-	2	1	3	24
TOTAL	46	30	10	12	12	4	5	1	10	140

age group had investments in life insurance of over \$5000. This pattern is consistent with the findings of the Federal Reserve Board Survey of Consumer Finances conducted in early 1959.(34)

Forty-nine percent of the subjects in the 65-and-over age group owned stocks and bonds of more than \$5000. Eighteen percent of the subjects had more than \$25,000 invested in this type of asset. Sixty-seven percent of the subjects reported savings accounts of over \$5000 and 38 percent reported having more than \$15,000 invested in savings. These findings reflect the large amount of estimated retirement income expected from the "other sources" category.

The two lowest income categories in this age group support other research findings, and are similar to the lower income categories of the other age groups in this study in that the number of these subjects reported assets was substantially lower than among those expecting a higher estimated retirement income. Only four persons in these two lowest income groups reported life insurance with a cash value of more than \$5000, slightly more than half reported savings over \$5000, and about one-fourth reported stocks and bonds valued over \$5000.

Table 45 shows the real estate holdings for the 65 and over age group. It indicates the number of persons in each estimated income category by the value of the real estate investment.

TABLE 45. Cash Value of Real Estate (in thousands) by Estimated Income Categories.
Age 65 and over

Estimated Income	\$0- \$5	\$5- \$10	\$10- \$15	\$15- \$20	\$20- \$25	\$25- \$30	\$30- \$35	\$35- \$40	\$40- \$50	\$50 \$50	TOTAL
\$0- \$1999	4	2	1	-	-	1	-	-	-	-	8
\$2000- \$3999	9	2	3	3	4	1	-	1	-	-	23
\$4000- \$5999	3	3	3	10	2	1	-	-	-	1	23
\$6000- \$7999	8	-	4	2	6	8	-	2	3	-	33
\$8000- \$9999	-	2	2	4	9	3	2	-	5	2	29
\$10,000 and over	4	-	1	1	2	4	3	4	3	2	24
TOTAL	28	9	14	20	23	18	5	7	11	5	140

More of the subjects in the two lowest estimated income categories reported owning homes than reported other types of investments. Eight percent of all respondents in this age group reported real estate holdings of more than \$5000, with the majority of the holdings in the \$10,000 to \$30,000 range.

Seven persons in this age group reported holdings in trusts of over \$5000, with a mean value of \$21,430. The personal property reported averaged \$7625 per person.

Potential Estimated Income for all Age Groups

Tables 46-48 show the relationship of the mean modified estimated income and the mean potential estimated income for the three oldest groups by the six estimated income categories. The mean estimated income was determined by summing the mid-points of the expected income from university pension, TIAA-CREF, Social Security, Civil Service, State of Michigan and royalties and patents for the subjects in each of the six income categories and dividing by the number of subjects in that category. The mean potential estimated income was made up of the mean estimated income plus the mean investment computed from the mid-points of investments in life insurance, stocks and bonds, and savings made by each estimated income category projected at a four percent annual return.

TABLE 46. Mean Increase in Annual Retirement Income Derived From Financial Retirement Planning by Estimated Income Category. Age: 40-49 Years.

	\$0- \$1999	\$2000- \$3999	\$4000- \$5999	\$6000- \$7999	\$8000- \$9999	\$10,000 & over
Mean Estimated Income	\$333	\$2317	\$5252	\$5975	\$7650	\$9600
Mean Potential Income	\$880	\$2945	\$6000	\$7455	\$8267	\$11,100

TABLE 47. Mean Increase in Annual Retirement Income Derived From Financial Retirement Planning by Estimated Income Category. Age: 50-64 Years.

	\$0- \$1999	\$2000- \$3999	\$4000- \$5999	\$6000- \$7999	\$8000- \$9999	\$10,000 & over
Mean Estimated Income	\$417	\$2480	\$3900	\$6100	\$7100	\$9200
Mean Potential Income	\$871	\$3030	\$4620	\$7093	\$8400	\$10,910

TABLE 48. Mean Increase in Annual Retirement Income Derived From Financial Retirement Planning by Estimated Income Category. Age: 65 Years and over.

	\$0- \$1999	\$2000- \$3999	\$4000- \$5999	\$6000- \$7999	\$8000- \$9999	\$10,000 & over
Mean Estimated Income	\$870	\$2955	\$3555	\$5400	\$6600	\$8525
Mean Potential Income	\$1595	\$3592	\$4348	\$6765	\$7925	\$11,200

These tables demonstrate the increases in retirement income that financial retirement planning achieved for the persons in this study. The yearly income that could be expected from this type of planning for the persons in the

40-49 age group ranged from \$547 to \$1500 annually for the six estimated income categories. The average increase in retirement income expected from retirement planning for this age group was \$920 per year.

For the persons in the 50-64 age group, the annual increase in retirement income ranged from \$454 for the \$0 to \$1999 estimated income category to \$1710 for the \$10,000 and over estimated income category. The average annual income from financial retirement planning was \$955.

The 65-and-over age group had the widest range of change in retirement income resulting from retirement planning. This ranged from \$637 annually for the \$2000-\$3999 estimated income category to \$2675 per year for the \$10,000 and over estimated income category. For this age group there was a smaller annual dollar increase for the \$2000-\$3999 category than for the \$0-\$1999 estimated income category. The average yearly increase in retirement income for the persons in this age group was \$1250.

These findings show, with only two exceptions, an upward trend in the amount of increase in expected retirement income that resulted from financial retirement planning from the lower to the higher estimated income categories. There is also an upward trend in this expected income from the younger to the older age groups.

CHAPTER V

SUMMARY AND IMPLICATIONS

The purpose of this study was to analyze the expected retirement incomes and the financial plans for retirement of a group of Michigan residents with emphasis on the extent of planning for retirement income, the hedging against inflation built into these plans, and the timing of the accumulation of investments as related to the age of the respondents.

Data concerning the retirement plans of a selected group of individuals became available making this study possible. These data were originally collected for another purpose. The respondents were comprised of 403 persons on university payroll.

The anticipated income at retirement for this group, as a whole, was higher than the income received by persons of retirement age in the general population. The United States Senate Special Committee on Aging found 31 percent of all families headed by a person of retirement age had an income of under \$2000 per year in 1960. Nearly 60 percent of all aged couples in 1960 had incomes below \$3000.(4, p.87) Slightly less than ten percent of the persons in this study were expecting retirement incomes of under \$2000.

Fifty-six percent of the persons in this study were anticipating retirement incomes of \$6000 or more. This pro-

portion is much higher than that now received by the retired population. The 1960 report of the United States Bureau of Census found nine and four-tenths percent of the two member families with the head 65 and over in the \$5000-\$6999 money income class, five and nine-tenths percent in the \$7000-\$9999 class, and five and six-tenths percent had incomes of \$10,000 and over. (5, p.92)

The sources of retirement income for the subjects in this study were largely made up of private pensions. The exceptions to this were the two lowest estimated income categories where Social Security benefits made up the major source of income. For these two categories, income from Social Security represented 44.5 percent of the expected retirement income. However, Social Security as a percent of the aggregate income for all estimated income categories was similar to that of the retirement aged population as a whole. The 1962 Survey of the Aged found Social Security making up 30 percent of money income received by the 65-and-over aged group. (15) This study found it representing 29 percent of the estimated retirement income. Private pensions, as a source of retirement income accounted for only three percent of aggregate retirement income for those of retirement age in the general population. (15) For the three oldest age groups in this study they accounted for 38 percent of expected retirement income. With the exception of 57 respondents all were covered by at least one type of private pension from their place of employment. One

hundred sixty respondents were expecting retirement income from both types of university private pension.

Table 49 shows the expected sources of retirement income for the respondents in this study as compared to the sources of retirement income for the 65 and over age group in the general population as found by the 1963 Survey of the Aged. (1, pp.38-39)

TABLE 49. Comparison of Expected Sources of Estimated Retirement Income for 403 Michigan Residents and the Actual Source of Retirement Income for the 65 and Over Age Group for the General Population as Found by the 1963 Survey of the Aged.

Sources of Retirement Income	403 Michigan Residents	1963 Survey
Percent due to:		
Earnings	-	32
Social Security	29	30
Private Pensions	38	3
Other Sources (including interests dividends & rents)	18	19
Other Public Benefits	13	6
Public Assistance	-	5
Veterans Benefits	-	4
Royalties and Patents	4	-

The asset position of the persons in this study showed the extent of retirement planning that had taken place. The amount of investments that had been made by these persons tended to be higher and more widely distributed with respect to type of investment than for the retirement aged population as a whole. The 1963 Survey of the Aged reports slightly more than one-sixth of the aged have no assets of any kind or have assets valued at less than \$1000. If the real estate holdings are excluded, persons in these circumstances increase to one-fourth of the aged in the survey. Assets of \$10,000 or more (excluding real estate) were reported by only one-third of the aged.(15)

This study indicates that the assets held by this particular group of persons are far more extensive than those of retirement aged persons in the general population. Real estate was the principle form of investment with 81 percent of all respondents reporting home ownership. Nearly half of these homes were worth \$20,000 or more. While only 25 percent of the under 40 age group had life insurance with a cash value of \$5000 or over, 51 percent of the other age groups reported policies of this amount. Twenty-five percent of the under 40 age groups reported savings of \$5000 or more, 58 percent of the other age groups reported savings of at least \$5000 and 38 percent had \$10,000 or more invested in savings.

Investing in stocks and bonds did not prove to be quite so popular, but nonetheless, 18 percent of the under 40 age group reported stocks and bonds valued at \$10,000 or more. Nearly 41 percent of the other age groups had investments in stocks and bonds of \$5000 or more and 29 percent reported holdings of over \$10,000.

Since there was, no doubt, considerable overlapping in holdings of life insurance, savings, and stocks and bonds, it would appear that many of these subjects had substantial assets. This was especially true of the two older age groups.

These facts indicate that extensive retirement planning had been done by this group of Michigan residents. A general upward trend was seen in the number of persons with assets and in the size of these holdings as the estimated income increased. Generally, the most change seemed to take place after the \$6000 to \$8000 estimated income level was reached. This trend was seen for all three types of retirement preparation--life insurance, savings and stocks and bonds.

Hypotheses

The hypotheses were designed to look at more specific relationships within the general framework of the financial retirement plans.

The first hypothesis states that a significant relationship exists between the estimated retirement income and the distribution of sources that make up the income expected at retirement. The data support this hypothesis. Table 50 indicates the number of persons in the three lowest estimated income categories (\$0-\$5999) and the three highest estimated income categories (\$6000-\$10,000 and over) by the distribution of sources of retirement income. The distributions of sources were obtained by adding the sources of estimated income, minus the "other sources" category, to the number of investments sources for each respondent. The respondents were then sorted into two distribution classifications--persons with less than five sources and persons with more than five sources of estimated retirement income. The "other sources" category was not included in order to avoid duplication.

TABLE 50. Relationship between the Estimated Retirement Income and the Distribution of Sources of Retirement Income.

Estimated Retirement Income	Persons with less than 5 sources		Persons with 5 or more sources	
	N	%*	N	%
\$0-\$5999	149	87	22	13
\$6000-\$10,000 & over	96	41	136	59

Degrees of freedom = 1; X^2 for table 86.1; X^2 of 6.63 significant at the 1% level. X^2 of 12.12 significant at the .05% level.

*Rounded figures.

Only 13 percent of persons in the lower expected income classification as compared with 59 percent in the higher income classification expected to have income from five or more sources.

The second hypothesis states that a significant relationship exists between the estimated retirement income and the amount of that income that comes from variable dollar sources.

Tables 51 and 52 demonstrate the relationship between the estimated retirement income and the amount from variable dollar sources.

TABLE 51. Estimated Retirement Income and Observed Frequencies of Income From TIAA-CREF.

Estimated Retirement Income	No TIAA-CREF	Under \$3000	\$3000 or more
\$0-\$5999	138	32	5
\$6000-\$10,000 & over	63	88	77

Degrees of freedom - 2; χ^2 for table 111.2; χ^2 of 9.21 significant at the 1% level.

TABLE 52. Estimated Retirement Income and Observed Frequencies of Income From Stocks and Bonds.

Estimated Retirement Income	No Stocks and Bonds	Under \$25,000	\$25,000 or more
\$0-\$5999	130	32	13
\$6000-\$10,000 & over	112	65	51

Degrees of freedom - 2; χ^2 for table 28.6; χ^2 of 9.21 significant at the 1% level.

The results of the chi-square test support the hypotheses. However, the data did not distinguish between the amount of retirement income expected from TIAA and CREF only one of which is a variable dollar source. The same is true of income expected from stocks and bonds. This is a limiting factor in the suitability of the data in the above tables as a basis for testing this hypothesis, but the high chi-square results suggest the existence of a significant relationship between these two variables.

The third hypothesis states that: The higher the expected level of estimated retirement income the earlier the retirement income planning occurred with respect to the age of the recipients.

This hypothesis can be neither supported nor negated by the data. The younger aged groups had fewer and less valuable investments than the older groups. The data do not give information on when these older groups started their financial retirement planning. However, the trend of the timing of the accumulation of assets in relation to the age groups emerges quite clearly. For the under 40 age group, the only investment of major importance was real estate. Fifty percent of this group held assets of this kind and only 25 percent or less had investments in life insurance, savings or stocks and bonds.

The 40-49 age group showed an increase in all four types of assets over the previous age group. The largest increase was in life insurance with 38 percent more of this

group reporting policies than the previous group. The real estate showed an increase nearly as large with 31 percent more reporting home ownership. There was a 12 percent increase in those reporting savings and 13 percent more own stocks and bonds.

The 50-64 age group showed only a slight increase in real estate holdings and a five percent drop in life insurance. Here the largest amount of change was a 20 percent increase in savings. There was also a small increase in the investments in stocks and bonds.

The 65 and over age group showed a different pattern of asset holdings compared with the previous group with a 21 percent drop in the percentage of persons with cash value in life insurance policies. There was a 12 percent increase in the percentage investing in stocks and bonds, a 10 percent increase in those with savings accounts and a drop in the number reporting home ownership.

Table 53 shows the percentage of persons in each age group who reported investments in each of the four types of assets.

TABLE 53. Asset Accumulation by Age Groups

Asset	Under 40	40-49	50-64	65 and over
Percent owning*				
Real Estate	50	81	85	80
Life Insurance	25	63	58	37
Savings Accounts	25	37	57	67
Stocks and Bonds	18	33	37	49

* rounded figures

The trend in asset accumulation seems to indicate that home ownership and life insurance are the most important investments for the 40-49 age group. This is the age group with heavy family responsibilities and so the investments of this type are the ones normally expected. In the 50-64 age group, savings become a major investment and the 65-and-over group show the greatest tendency toward stocks and bonds; however, for this group too, savings are of major importance. The tendency toward stocks for the older group may indicate that at this age they are less concerned with the increased risk involved with this type of investment or are more concerned with inflation.

Limitations

The weaknesses of the study result, in part, from the limiting nature of the data. It would have been interesting to have included information on the debts owed by these persons and the debt retirement plans, especially in the real estate investments, as these are significant factors in estate building programs.

The extent of hedging against inflation that has been incorporated into the retirement plans would have been more evident if the amount invested in stocks had been specifically designated separately from the bond investment.

The inclusion of a "none" category in the questionnaire for the amounts invested, as was done for the sources of expected income, would have given a clearer picture of the

investments. If this category had been included a response of \$0 - \$5000 could also have been computed at a mid-point providing a more complete analysis of the investments, particularly for those just beginning investment programs. Since the respondents did not have the option of a "none" category a response in the \$0 - \$5000 category was considered a \$0 investment on the assumption the majority indicating that response would have zero investment. A response in the \$5000 - \$10,000 category was the least amount considered as an investment in this study. Appendix B contains some questions designed to eliminate some of these weaknesses.

Summary

Within the limitations of the data, this study has attempted to analyze the sources of estimated retirement income for this group of Michigan residents. It has also looked at the financial retirement plans made by these persons and the potential such plans have for increasing income after retirement.

The results show that planning for retirement, in the years before this stage is reached, by investing in real estate, life insurance, stocks and bonds, and savings programs has a great potential for contributing to the income after retirement. The study shows that this particular group of persons have made great strides in retirement preparation. This is especially true of those in the older age groups, but many in the younger age group have also

begun programs of this type. While it is evident that those with larger anticipated retirement incomes have made more investments of the kind that will increase retirement incomes, those with smaller estimated incomes have also been able to initiate this kind of planning and the results of the study indicate that these programs will put these persons in a stronger financial position after retirement.

As has been mentioned earlier in the study this is a selected group and no generalization to a larger population can be made.

A further purpose of this study was to draw implication from the findings for teaching family financial management.

One important implication for teaching is indicated not so much by what is in the data, but by what is not there: the fact that there were so few respondents in the under 40 and 40-49 age groups. There are two possible reasons for this: 1) a lack of interest in the retirement period at these ages, and, 2) a lack of knowledge in how to estimate the retirement income. The important role education can play is pointed out by both of these reasons.

Education, whether it is in the classroom or in family financial counseling, can help promote an active interest in preparing for the retirement period. Progress in this area could be achieved by individuals gaining a better understanding of this period of the life cycle through knowledge of the socio-psychological adjustments that must

be faced with the exit from the labor force. Also, the effects that the sharp decrease in income has on the style of living of the retiree present a serious problem for many. Both of these are directly related to financial planning. It has been pointed out that the less change that must take place in the style of living the more successful and happier the adjustment to retirement.

The analysis of the data in this study indicated that helpful areas to include in a family financial management educational program should relate to:

1. the types of investment opportunities and the purpose for which each can best be used;
2. information on the value of providing a hedge against inflation and an understanding of how this protection can best be included in financial plans;
3. the relative costs and risks involved in different types of investments;
4. the sources of more detailed information on specific types of investments;
5. methods of determining what financial returns can be expected from different types of investments;
6. methods of computing total worth;
7. the function of the Social Security program and how to estimate the income from this source at retirement age;

All of these skills, necessary for making and carrying out realistic financial retirement plans, could be acquired or enhanced through education.

Education could also play a part in stressing the importance of not waiting until retirement is imminent before starting financial retirement planning. These plans can be made far more effective if started early in the period of employment. Buckley suggests that plans for financial retirement requirements should be underway by age 35.(1, p.73)

Still another implication for education is the contribution that could be made to employees in the plants, factories and other establishments. This type of education should begin long before the retirement years. In this way realistic plans could be made and assistance would be available in carrying them through. The same general information as described above would be useful in this setting along with more specific and personal planning. An important factor for employees is to have a clear picture of what the company retirement benefits are and how they might best be supplemented to fit individual retirement plans. The study reported by Reid indicated that education programs of this kind resulted in more favorable expectation for the future. The persons taking part in the programs were more actively involved in planning for their retirement years.(24)

The findings of this study point out the superior retirement position of the persons with the variable annuity pension. These persons have a built-in hedge against inflation as well as a higher expected retirement income. Unfortunately,

this type of pension is not available to many retirees, but through family financial education an individual could learn how to develop a similar program for himself.

Implications for further Research

The review of literature revealed a very limited amount of data concerning the retirement plans made by individuals. This area of study becomes increasingly important as this stage of the life cycle lengthens and as the retirees become a larger portion of the general population. If professional persons are to be prepared to assist individuals in making and carrying out retirement plans, further research in this area is needed. A study similar to this one which eliminated the weaknesses listed above would prove helpful.

A longitudinal study investigating the plans made before retirement and the actual results of the plans on the retirement income of the individuals would be enlightening. A study using the current incomes and family size and structure as related to investment planning would also provide useful information.

Perhaps the most important implication for research indicated by this study is the need for data from a random sample. In this way broader generalizations could be made and an important contribution to the information for understanding and using financial retirement planning to supplement fixed retirement income could be made.

BIBLIOGRAPHY

Books

1. Buckley, Joseph C., The Retirement Handbook, New York, 1967.
2. Goldstein, Sidney, Consumption Patterns of the Aged, Philadelphia, 1960.
3. Kreps, Juanita, ed., Employment, Income and Retirement Problems of the Aged, Durham, North Carolina, 1963.
4. Miller, Herman P., Rich Man Poor Man, New York, 1964.
5. Orbach, Harold L. and Tibbitts, Clark, eds., Aging and the Economy, Ann Arbor, 1963.

David, Alvin, "Trends and Probabilities in Sources of Retirement Income."

Epstein, Lenore, "The Income Position of the Aged."

Fisher, Janet, "Measuring the Adequacy of Retirement Incomes."

Jaffe, A. J., "Population, Needs, Production, and Older Manpower Requirements."

Lininger, Charles, "Some Aspects of the Economic Situation of the Aged: Recent Survey Findings."
6. Report of the White House Conference on Aging, The Nation and Its Older People, United States Department of Health, Education and Welfare, Washington, D. C., 1961.
7. Rosow, Irving, Social Integration of the Aged, New York, 1967.
8. Shadko, Jeannette Bond, Changes in Activity of Older People: Benzie County, Michigan, Unpublished Masters Thesis, Michigan State University, 1967.
9. Tibbitts, Clark and Donahue, W. Eds., Social and Psychological Aspects of Aging: Aging Around the World, New York, 1960.

Epstein, Lenore, "Some Problems in Measuring the Economic Status of the Aged in the United States."

Jaffe, A. J. and Milavsky, J. R., "Unemployment, Retirement and Pensions."

Articles

10. "Assets of the Aged," Family Economic Review, Consumer and Food Economic Agriculture Research Service, Research Division United States Department of Agriculture, June, 1965, p.7.
11. Butler, Robert N., "Crises and Contributions in Later Life," American Journal of Orthopsychiatry, Vol. 37, 1967, pp. 337-38.
12. David, Alvin, "Report on Problems of Retirement Age and Related Conditions for the Receipt of Old-Age Benefits," International Social Security Association Bulletin, Vol. 18, 1965, pp. 97-109.
13. Davidson, Maria, "Social and Economic Characteristics of Aged Persons (65 and over) in the United States in 1960," Eugenics Quarterly, Vol. 14, 1967, pp. 27-44.
14. Eppley, David, "Concurrent Receipt of Public Assistance and Old-Age Survivors and Disability Insurance by Persons 65 and Over in Early 1963," Welfare in Review, Vol. 2, 3, 1964, pp. 18-23.
15. Epstein, Lenore, "Income of the Aged in 1962: First Findings of the 1963 Survey of the Aged," Social Security Bulletin, Vol. 27, 1964, pp. 3-24.
16. Fisher, Jacob, "Postwar Changes in the Income Position of the Aged," Social Security Bulletin, Vol. 17, 1954, pp. 7-10.
17. Kent, Donald P., "Social and Cultural Factors Influencing the Mental Health of the Aged," American Journal of Orthopsychiatry, Vol. 36, 1966, pp. 680-85.
18. Kirchner, Wayne, "The Attitudes of Special Groups Toward the Employment of Older Persons," Journal of Gerontology, Vol. 12, 1957, pp. 216-20.
19. Marmor, Judd, "The Crisis of Middle Age," American Journal of Orthopsychiatry, Vol. 37, 1967, pp. 336-37.

20. Martin, John and Doran, Ann, "Evidence Concerning the Relationship Between Health and Retirement," Sociological Review, Vol. 14, 1966, pp. 329-43.
21. "Money Enough to Retire on," Changing Times, Vol. 20, July, pp. 7-12, August, pp. 27-32, September, pp. 24-30, 1966.
22. Palmore, Erdman, "Retirement Patterns Among Aged Men," Social Security Bulletin, Vol. 27, 1964, pp. 3-10.
23. _____, "Work Experiences and Earning of the Aged in 1962: 1963 Survey," Social Security Bulletin, Vol. 27, 1964, pp. 3-14.
24. Reid, Otto M., "Aging Americans: A Review of Cooperative Research Projects," Welfare in Review, Vol. 4, 5, 1966, pp. 1-12.
25. "Report on the Investment of Old-Age Invalidity and Survivors Insurance Funds," International Social Security Association Bulletin, Vol. 18, 1965.
26. Rosenblatt, Aaron, "The Functions of Work and Employment for Older Person," Journal of Jewish Communal Service, Vol. 42, 1966, pp. 259-68.
27. Schorr, A. L. "The Family Cycle and Income Development," Social Security Bulletin, Vol. 29, 1966, pp. 14-25.
28. Thomae, Hans, "Ageing and Problems of Adjustment," International Social Science Journal, Vol. 15, 1963, pp. 366-76.
29. Waldman, Saul, "Oldage Benefits for Workers Retireing Before Age 65," Social Security Bulletin, Vol. 29, 1966, pp. 38-42.
30. Wedderburn, Dorothy Cole, "Economic Aspects of Aging," International Social Science Journal, Vol. 15, 1965, pp. 394-409.
31. White, Gladys O., "Meeting Financial Needs Under Old Age Assistance," Welfare in Review, Vol. 1, 1963, pp. 1-6.
32. _____, "Income of Older People," Welfare in Review, Vol. 1, 1963, pp. 7-11.
33. Youmans, E. Grant, "Objective and Subjective Economic Disengagement Among Older Rural and Urban Men," Journal of Gerontology, Vol. 21, 1966, pp. 439-41.

Pamphlets

34. "Basic Facts on the Health and Economic Status of Older Americans," Washington Government Printing Office, 1961.
35. "City Worker's Family Budget for a Moderate Living Standard Autumn 1966," Bureau of Labor Statistics, Washington, D. C., 1967.
36. Galloway, Lowell, "The Retirement Decision: An Exploratory Essay," Research Report No. 9, Washington Social Security Administration, 1965.
37. "Impact of Inflation on Retired Persons," National Advisory Committee, White House Conference on Aging, Washington, D. C., 1960.
38. Lamale, Helen, "New BLS Standard Budgets and Living Cost Indexes," United States Department of Labor, Bureau of Labor Statistics, Washington, D. C., 1967.
39. Orshansky, Mollie, "Counting the Poor: Another Look at the Poverty Profile," Reprinted from the Social Security Bulletin, 1965.
40. "Revised Equivalence Scale: For Estimating Income and Budget Costs by Family Type," United States Department of Labor, Bureau of Labor Statistics, Washington, D. C., 1967.

APPENDIX A

**Questions from the original questionnaire
that were used in this study.**

APPENDIX A

3. Your age to your nearest birthday:

key 0:	under 40	3:	60-64	6:	75-79
1:	40-49	4:	65-69	7:	80-84
2:	50-59	5:	70-74	8:	85-89
				9:	90 and over

Please indicate the amount of annual income you estimate you will receive after retirement from the sources listed below.

54. University pension annually

key 0:	none	3:	\$1001-\$1500
1:	less than \$500	4:	\$1501-\$2000
2:	\$501-\$1000	5:	\$2001-\$3000

55. TIAA and/or CREF annually

key 0:	none	5:	\$2001-\$3000
1:	less than \$500	6:	\$3001-\$4000
2:	\$501-\$1000	7:	\$4001-\$5000
3:	\$1001-\$1500	8:	\$5001-\$6000
4:	\$1501-\$2000	9:	\$6001 and over

56. Social Security annually (Upon request the local Department of Social Security Administration will send you a form to request your status from the national office. For the form telephone 372-1910.)

key 0:	none	3:	\$1001-\$1500
1:	less than \$500	4:	\$1501-\$2000
2:	\$501-\$1000	5:	\$2001-\$3000

57. United States Civil Service Retirement Program annually*

key 0:	none	3:	\$1001-\$1500	6:	\$3001-\$4000
1:	\$501-\$1000	4:	\$1501-\$2000	7:	\$4001-\$5000
2:	\$1001-\$1500	5:	\$2001-\$3000	8:	\$5001-\$6000
				9:	\$6001 and over

58. State of Michigan annually (as public school teachers, etc.)*

key 0:	none	3:	\$1001-\$1500	6:	\$3001-\$4000
1:	less than \$500	4:	\$1501-\$2000	7:	\$4001-\$5000
		5:	\$2001-\$3000	8:	\$5001-\$6000
				9:	\$6001 and over

*adjustments were made for the obvious errors in these questions

59. Royalties and Patents annually

key 0:	none	3:	\$1001-\$1500	6:	\$3001-\$4000
1:	less than \$500	4:	\$1501-\$2000	7:	\$4001-\$5000
2:	\$501-\$1000	5:	\$2001-\$3000	8:	\$5001-\$6000
				9:	\$6001 and over

60. Other sources annually

key 0:	none	3:	\$1001-\$1500	6:	\$3001-\$4000
1:	less than \$500	4:	\$1501-\$2000	7:	\$4001-\$5000
2:	\$501-\$1000	5:	\$2001-\$3000	8:	\$5001-\$6000
				9:	\$6000 and over

Please estimate your and your spouse's net worth at retirement for each of the sources below --

62. Real Estate at present market price

key 0:	less than \$5000	5:	\$25,001-\$30,000
1:	\$5001-\$10,000	6:	\$30,001-\$35,000
2:	\$10,000-\$15,000	7:	\$35,001-\$40,000
3:	\$15,001-\$20,000	8:	\$40,001-\$50,000
4:	\$20,001-\$25,000	9:	\$50,000 and over

63. Cash value of life insurance policies

key 0:	under \$5000	5:	\$25,001-\$30,000
1:	\$5001-\$10,000	6:	\$30,001-\$35,000
2:	\$10,001-\$15,000	7:	\$35,001-\$40,000
3:	\$15,001-\$20,000	8:	\$40,001-\$50,000
4:	\$20,001-\$25,000	9:	\$50,001 and over

64. Stocks and Bonds at present market value

key 0:	under \$5000	5:	\$25,001-\$30,000
1:	\$5001-\$10,000	6:	\$30,001-\$35,000
2:	\$10,001-\$15,000	7:	\$35,001-\$40,000
3:	\$15,001-\$20,000	8:	\$40,001-\$50,000
4:	\$20,001-\$25,000	9:	\$50,001 and over

65. Savings accounts in banks, savings and loan, credit union, etc.

key 0:	under \$5000	5:	\$25,001-\$30,000
1:	\$5001-\$10,000	6:	\$30,001-\$35,000
2:	\$10,001-\$15,000	7:	\$35,001-\$40,000
3:	\$15,001-\$20,000	8:	\$40,001-\$50,000
4:	\$20,001-\$25,000	9:	\$50,001 and over

66. Trust Accounts

key 0:	under \$5000	5:	\$25,001-\$30,000
1:	\$5001-\$10,000	6:	\$30,001-\$35,000
2:	\$10,001-\$15,000	7:	\$35,001-\$40,000
3:	\$15,001-\$20,000	8:	\$40,001-\$50,000
4:	\$20,001-\$25,000	9:	\$50,001 and over

67. Personal property including household goods, automobiles, etc.

key	0:	under \$5000	5:	\$25,001-\$30,000
	1:	\$5001-\$10,000	6:	\$30,001-\$35,000
	2:	\$10,001-\$15,000	7:	\$35,001-\$40,000
	3:	\$15,001-\$20,000	8:	\$40,001-\$50,000
	4:	\$20,001-\$25,000	9:	\$50,000 and over

APPENDIX B

These questions were designed to show how some of the weaknesses in the study might be eliminated. They might prove useful to anyone interested in conducting a similar study.

APPENDIX B

Please indicate the amount of annual income you estimate you will receive after retirement from the sources listed below. (Questions 1-9)

1. University pension annually

key 0:	none	3:	\$1001-\$1500
1:	less than \$500	4:	\$1501-\$2000
2:	\$501-\$1000	5:	\$2001-\$3000
2. TIAA annually

key 0:	none	5:	\$2001-\$3000
1:	less than \$500	6:	\$3001-\$4000
2:	\$501-\$1000	7:	\$4001-\$5000
3:	\$1001-\$1500	8:	\$5001-\$6000
4:	\$1501-\$2000	9:	\$6001 and over
3. CREF annually

key 0:	none	5:	\$2001-\$3000
1:	less than \$500	6:	\$3001-\$4000
2:	\$501-\$1000	7:	\$4001-\$5000
3:	\$1001-\$1500	8:	\$5001-\$6000
4:	\$1501-\$2000	9:	\$6001 and over
4. Social Security annually

key 0:	none	3:	\$1001-\$1500
1:	less than \$500	4:	\$1501-\$2000
2:	\$501-\$1000	5:	\$2001-\$3000
5. United States Civil Service Retirement Program annually

key 0:	none	5:	\$2001-\$3000
1:	less than \$500	6:	\$3001-\$4000
2:	\$501-\$1000	7:	\$4001-\$5000
3:	\$1001-\$1500	8:	\$5001-\$6000
4:	\$1501-\$2000	9:	\$6001 and over
6. State of Michigan annually

key 0:	none	5:	\$2001-\$3000
1:	less than \$500	6:	\$3001-\$4000
2:	\$501-\$1000	7:	\$4001-\$5000
3:	\$1001-\$1500	8:	\$5001-\$6000
4:	\$1501-\$2000	9:	\$6001 and over
7. Royalties and Patents annually

key 0:	none	5:	\$2001-\$3000
1:	less than \$500	6:	\$3001-\$4000
2:	\$501-\$1000	7:	\$4001-\$5000
3:	\$1001-\$1500	8:	\$5001-\$6000
4:	\$1501-\$2000	9:	\$6001 and over

8. Other fixed dollar sources annually resulting from veterans benefits, places of former employment, etc. (Not personally planned investments)
- | | | | |
|--------|-----------------|----|-----------------|
| key 0: | none | 5: | \$2001-\$3000 |
| 1: | less than \$500 | 6: | \$3001-\$4000 |
| 2: | \$501-\$1000 | 7: | \$4001-\$5000 |
| 3: | \$1001-\$1500 | 8: | \$5001-\$6000 |
| 4: | \$1501-\$2000 | 9: | \$6001 and over |
9. Other variable dollar sources annually resulting from places of former employment, etc. (Not personally planned investments)
- | | | | |
|--------|-----------------|----|-----------------|
| key 0: | none | 5: | \$2001-\$3000 |
| 1: | less than \$500 | 6: | \$3001-\$4000 |
| 2: | \$501-\$1000 | 7: | \$4001-\$5000 |
| 3: | \$1001-\$1500 | 8: | \$5001-\$6000 |
| 4: | \$1501-\$2000 | 9: | \$6001 and over |

Please estimate net worth at retirement for each of the sources below.

10. Real Estate at present market price
- | | | | |
|--------|-------------------|----|-------------------|
| key 0: | none | 5: | \$20,001-\$25,000 |
| 1: | less than \$5000 | 6: | \$25,001-\$30,000 |
| 2: | \$5001-\$10,000 | 7: | \$30,001-\$40,000 |
| 3: | \$10,001-\$15,000 | 8: | \$40,001-\$50,000 |
| 4: | \$15,001-\$20,000 | 9: | \$50,000 and over |
11. Your age when you started investing in Real Estate
- | | | | |
|--------|----------|----|-------------|
| key 0: | under 40 | 2: | 50-64 |
| 1: | 40-49 | 3: | 65 and over |
12. Cash Value of Life Insurance policies
- | | | | |
|--------|-------------------|----|-------------------|
| key 0: | none | 5: | \$20,001-\$25,000 |
| 1: | less than \$500 | 6: | \$25,001-\$30,000 |
| 2: | \$5001-\$10,000 | 7: | \$30,001-\$40,000 |
| 3: | \$10,001-\$15,000 | 8: | \$40,001-\$50,000 |
| 4: | \$15,001-\$20,000 | 9: | \$50,000 and over |
13. Your age when you started investing in life insurance
- | | | | |
|--------|----------|----|-------------|
| key 0: | under 40 | 2: | 50-64 |
| 1: | 40-49 | 3: | 65 and over |
14. Cash value of Stock at present market value
- | | | | |
|--------|-------------------|----|-------------------|
| key 0: | none | 5: | \$20,001-\$25,000 |
| 1: | less than \$500 | 6: | \$25,001-\$30,000 |
| 2: | \$5001-\$10,000 | 7: | \$30,001-\$40,000 |
| 3: | \$10,001-\$15,000 | 8: | \$40,001-\$50,000 |
| 4: | \$15,001-\$20,000 | 9: | \$50,000 and over |

15. Your age when you started investing in Stocks
 key 0: under 40 2: 50-64
 1: 40-49 3: 65 and over
16. Cash value of Bonds at present market value
 key 0: none 5: \$20,001-\$25,000
 1: less than \$500 6: \$25,001-\$30,000
 2: \$5001-\$10,000 7: \$30,001-\$40,000
 3: \$10,001-\$15,000 8: \$40,001-\$50,000
 4: \$15,001-\$20,000 9: \$50,000 and over
17. Your age when you started investing in Bonds
 key 0: under 40 2: 50-64
 1: 40-49 3: 65 and over
18. Savings accounts in banks, savings and loan, credit union, etc.
 key 0: none 5: \$20,001-\$25,000
 1: less than \$500 6: \$25,001-\$30,000
 2: \$5001-\$10,000 7: \$30,001-\$40,000
 3: \$10,001-\$15,000 8: \$40,001-\$50,000
 4: \$15,001-\$20,000 9: \$50,000 and over
19. Your age when you started investing in Saving accounts as a regular investment
 key 0: under 40 2: 50-64
 1: 40-49 3: 65 and over
20. Income from other sources annually resulting from personally planned investments other than those mentioned above (such as rents, interest from mortgages held or from other types of investments, etc.).

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