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THE FINANCIAL STATUS
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THE FINANCIAL STATUS OF MICHIGAN RURAL FAMILIES WITH A FINANCIAL MANAGER OVER 55.

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ABSTRACT

THE FINANCIAL STATUS OF MICHIGAN RURAL FAMILIES WITH A FINANCIAL MANAGER OVER 55.

By

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Families are spending more years in retirement but little is known about their changing financial statuses as they age. Families in two age categories (55 to 64, and 65 and over) were compared by describing their income, credit, debt, debt-to-income ratio and assets. Secondary analysis of data collected in the 1988 Michigan Family Economic Well-Being Survey was used to describe 143 financial managers. The Chi-square test of independence was used to measure the association between twelve dependent variables and the independent variables: education, retirement status, gender, age category, marital status, and household size.

Age category was significantly associated with: total amount of income, number of credit sources utilized, total amount of debt, and the debt-to-income ratio. Retirement status was associated with the total value of assets. Eighteen percent of the 55 to 64 year olds had more total debt obligation than their current 1987 income compared to six percent of the 65 and older group.

TO FAMILY MEMBERS,
PAST AND PRESENT,
WHO DEMONSTRATED THAT HARD WORK
AND DETERMINATION
CAN MAKE ALL DREAMS COME TRUE.

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Chapter 1

INTRODUCTION

Recent media attention has focused on the changes in the United States population. Our youth oriented society is changing to a society with a growing number of older people. More people are living longer and consequently spending more years in retirement. In 1900, four percent of the total population was 65 years old and older (3.1 million) (United States Census Office, 1902). The United States Bureau of the Census (1989) projections for 1990 are that 13 percent of the United States population are 65 and older (35 million) and the projections for 2080 are for 25 percent of the population over 65 years of age (72 million).

The purpose of this research was to explore the financial status of older families. More specifically, the research focused on the role of income, credit, debt, debt-to-income ratios, and assets as an indicator of a family's well-being. The researcher examined the financial status of families with a head of the household either 55 to 64 years old or 65 years old and older. It was the aim of the researcher to describe any differences between these two age groups. These two groups were chosen because the individuals were either preparing for retirement or they were already retired.

The majority of previous research has explored the over 65 year old group and concentrated on topics such as health issues, challenges to the caregivers, and the cost of long term care. Little attention has been paid to older families as they progress from age 55 to 64 to 65 and older age categories.

There are several reasons why it is important to investigate families in these two age categories. The first reason would be to develop a better understanding of the financial transitions made from one age stage to another. This financial transition is not well understood. Secondly, to focus on whether or not pre-retirees plan for retirement, and if so, what is involved in the planning. Finally, the public policy implications for governments which are interested in the economic welfare of their constituents.

The 55 to 64 year olds are typically characterized as pre-retirees who are preparing for the transition to retirement. Families in this stage are completing their final years of paid employment and may still have work related earnings. They are also attempting to increase their "nest egg" of asset accumulation which they will use in their retirement years. This period has been characterized as low borrowing and high saving according to the Life Cycle Hypothesis of Saving (Ando & Modigliani, 1963). In this life stage, the 55 to 64 years old families are attempting to pay off debts such as mortgage and consumer credit debts.

The 65 and older families are generally in the period of retirement. People are no longer able to perform paid

employment due to health reasons or may choose not to work any longer and therefore "retire". Families in this age category experience a drop in income level due to their withdrawal from the work force. They also have a wider variety of income sources as they receive benefits from Social Security, pensions, IRA's, and savings interest (Maxfield, 1985). The use of consumer credit may be less than the 55 to 64 group because they no longer have expenses related to child rearing or employment activities (Danes & Hira, 1987; Allan, 1979). These families will also begin to utilize their "nest egg" to supplement retirement income or to meet unanticipated financial needs. Their debts are generally small because they have little or no mortgage debt and little consumer debt.

The second reason why it is important to study this age group is to determine how pre-retirees plan for expenses in their later life when their life expectancy is unknown. Have pre-retirees acquired assets that are easily liquidated after retirement? Have they contributed to IRA, 403b, or Keogh funds? Do they have any savings? Whether or not individuals have the financial resources to live a viable life has not yet been a major concern of researchers. By comparing the two age groups, this research will provide some information as to whether incomes of people 65 and older holds up to changes in inflation, interest rates, the costs of food, shelter, and clothing.

This researcher acknowledges that not all individuals manage an easy transition as they age, and this is another reason to study older families. This uneasy transition may

be due to their sources of income. Social security benefits are one of the only sources that are indexed to keep up with inflation. This, however, is not the only source of income. Individuals who receive pension income may find that this source does not keep up with inflation because many pensions are not indexed. The older family may also have debts that create financial hardships in the later years. A life time of debt accumulation may be particularly devastating for families who now experience a drop in income.

There are many societal reasons to research older families and their financial status. What happens if older families are unable to provide for themselves? Should governments increase benefit payments? Should employers encourage older workers to stay in the work force longer in order to increase income earnings? Should all health expenses be paid for by the federal government? Our society of families may have to contend with paying higher taxes in order to allow older families to have financially secure futures.

This research will examine the major sources of income and their contribution to a family's financial status. Previous research results recorded the major sources of income for older families as social security, employer provided pensions, earnings, and asset income (Maxfield, 1985). Past research on income has also attempted to specify the total decrease in income after retirement. This is useful in projecting whether or not families are able to maintain the same level of living after retirement.

The use of consumer credit as a financial resource is

another area of limited research. According to the Life Cycle Hypothesis (Ando & Modigliani, 1963), pre-retirement is a period of high saving and low borrowing. The theory suggested that families age 55 to 64 accumulate savings in order to establish "nest eggs". These "nest eggs" supplement income of families in retirement years, or they can be used to pay off debts after retirement. Since consumer credit is a part of household debt, more older families may find it necessary to use credit. Researchers have found that older families do use credit but the major types of credit utilized by those over 55 years old has not been a focus of research.

Little attention has been given to the total debt of older families. This lack of attention is perhaps sustained by the assumption that older families have paid off all their debts including their mortgage and therefore no longer need to borrow. The amount of debt held by older families is important to consider because most older families experience a drop in income as they retire. If they experience a drop in income and simultaneously an increase in debts, a family will be responsible for debt and interest payments. These debts could create difficulties for some families who may not have enough money to survive daily expenses such as food, clothing, and shelter. Further research could possibly uncover if individuals with identifiable characteristics are prone to debt after retirement.

In comparing the debt and income levels of this group, no studies have explored the household debt-to-income ratio for older families. This ratio when multiplied by 100

provides the percent of debt-to-income and it is an indicator of the financial health of a family. For example, if an older family has a mortgage and consumer debt of $25,000 and a total annual income of $20,000, the debt-to-income ratio would be 125 percent. This would mean that their debt is 1.25 times greater than their income. If another older family had $5,000 worth of debts and a $20,000 income the debt-to-income ratio would be .25. This ratio would indicate that the family had debts equal to 25 percent of their incomes. The family in the second example has a healthier financial status because less of their income is committed to debts. This ratio, therefore, has the potential of evaluating the financial status of an older couple beyond the traditional description of debts and income.

Research on financial assets has focused on the home as the major asset. Friedman & Sjogren (1981) concluded that after excluding the equity in the home, a large part of their sample had little or no assets and approximately four to five percent had assets exceeding $100,000. The types of assets and the ease of asset liquidation has not been well researched. More research is necessary in this area to clarify whether there really exists a "nest egg" sufficient for a financially adequate retirement period.

Demographic changes in the United States population are becoming more important in political, economic, and social decisions. There is a great need to understand the financial behavior of aging persons as more people are living longer and often beyond the age they had planned. This creates several

personal and societal implications. Increasingly more people may find that their resources will not cover all their expenses at some advanced age. Further research is needed to look at the income resources, credit sources, debts, assets, and the household debt-to-income ratios of people approaching retirement and after retirement. This information would be significant for educators, economists, policy makers, gerontologists, professionals who help the family, the business world, and family members themselves. All of these individuals need to see how families adjust to their change in financial status upon retirement and the impact for the rest of their lives.

ECOLOGICAL PERSPECTIVE ON THE PROBLEM

In the United States, where much of the family stability depends on employment income, planning for retirement and retirement itself are challenges to the family finances. Families do not plan for retirement independently from other systems in their environment, and therefore the surrounding environments must be considered in research.

Examples of this interdependency between older families and their surrounding environments are numerous. First of all, when individuals have health problems, they will gain assistance from the medical services in their community in order to receive treatment. This medical system is part of the Human Constructed Environment (Bubolz et al., 1979). Secondly, if a person has a change in taxes rates, he or she is then affected by local, state, or federal government

systems decisions. Thirdly, if an individual has debts to pay, he or she must interact with financial systems in his or her environment. Similarly, many families would be adversely affected if the government decided to cut or limit the Social Security benefits on which they depend for income. Finally, an older person may have investments which serve as a source of income. He or she will be hopeful that the economy continues to prosper so that the investments will yield a high return. By using these examples, the researcher realizes the interdependency of older families on the surrounding environments and the necessity to consider the ecological perspective.

The researcher recognizes that older financial managers are affected by the macro environments of government systems, laws, the local, state, and national economies, interest rates and inflation rates, food, shelter, and utility costs, and health care costs. These interdependent systems assist in the difficulty of successfully predicting a family's financial security over a possible 20 to 30 year period in retirement. However, this study will not include ecological variables. The research will be concentrating on the personal characteristics that affect important components of the financial status of families over 55 years old.

RESEARCH OBJECTIVES

The purpose of this study was to examine the financial status of those families with a financial manager aged 55 or over. This descriptive study investigated five areas of a

family's financial status.

The first area investigated the total household income and income sources of the over 55 year old group. The second area investigated sources of consumer credit utilized, and the total number of sources used by 55 to 64 year olds, and 65 and older respondents. Next, the total household debt and the types of household debt were explored. In the fourth area, the researcher created the debt-to-income ratio which allowed for an assessment of the financial healthiness of the two age groups. Finally, the types of household assets and the total value of assets held were analyzed.

The final objective involved statistical analysis to measure the association of several financial variables to selected demographic variables. The financial variables were: total household income, total number of sources of household income, number of credit sources utilized, credit management behavior, total household debt, total number of types of household debt, debt-to-income ratios, total value of household assets, and total number of types of household assets. The dependent variables were measured for an association with the independent variables of education, retirement status, gender, age category, marital status, and number of family members.

Chapter 2

REVIEW OF LITERATURE

This review will focus on five areas of the financial status of families with a financial manager 55 years and older. First of all, the review explores income and the variables affecting the level and sources for older families. Secondly, the research investigating consumption and income will be highlighted. Next, is research exploring the sources of credit held by older families, followed by research on the household debts of older families, and debt-to-income ratios. The last section will discuss research relating to household assets.

INCOME

Virtually all the research focusing on money income discussed the total amount of income and the effect of retirement on the level of income. Researchers were interested in whether or not families experienced a drop in income after retirement. If a large drop in income was experienced by families, it was felt that they were unable to function adequately. Retired families with higher total incomes and more sources of income were expected to have a higher level of living than retired families with low incomes

and a small number of income sources. Other researchers have investigated the discretionary income of older individuals. According to Mandese (1989), persons over 50 years old earned 42 percent of all after tax income and controlled half of the discretionary spending power in the United States.

The withdrawal from the labour force was seen as the primary cause of a reduction of income by Ruffin (1989), Friedman & Sjogren (1981), and Hefferan, (1981). However, this research raised new questions about the definition of retirement. Respondents may have defined "retirement" in different ways. First of all, many people "retire" from their primary occupation but are in fact still working at some other occupation. Secondly, the drop in income may be due to the fact that they are now working part time instead of full time. These two previous definitions of retirement may have biased past research exploring the effect of retirement on income. The total income figures for retired persons would have included some individuals who were not working at any type of employment and other individuals who were still working part time or full time (Friedman & Sjogren, 1981).

The total income levels of pre-retirees and retirees have been the focus of two major studies, both by the Social Security Administration. The first study, the Retirement History Survey (RHS) started in 1969. Individuals were interviewed every two years until 1979. The purpose of this survey was to collect data on the assets and debts of the respondents over time. Retirees were interviewed in pre-retirement and then during the early stages of retirement.

The individuals were aged 58 to 62 at the beginning of the study. It is one of the few longitudinal studies to date (Friedman & Sjogren, 1981). In the second study, called the New Beneficiary Study, first time recipients of retired worker Social Security benefits in 1980 and 1981 were the focus of the study. All of the respondents were age 62 or older. These new beneficiaries were divided into two age groups, 62 to 64 and 65 and over. The purpose of the study was to obtain a comprehensive and detailed work history of Social Security beneficiaries and spouses. This included information on income sources, asset holdings, marital and child rearing histories, and the costs and benefits associated with the beginning of retirement as well as health characteristics (Maxfield, 1985).

The New Beneficiary Study (NBS) established a relationship between age category and median income. Individuals who received their first Social Security benefit after age 65 had higher median incomes than those who received their first benefit at age 62 to 64 regardless of sex or marital status. The researchers offered several reasons for this difference. Those in the 65 and older age group were more likely to still have income from earnings. Secondly, they were more likely to be receiving a full social security benefit and not a reduced benefit (Maxfield, 1985). Thirdly, the researchers found the over 65 age group were more likely to have income from assets. Ycas & Grad (1987), using the 1984 Current Population Survey's data on income, found that 19 percent of 65 and older respondents had incomes less than

$5,000 and 22 percent had incomes more than $20,000.

Marital status was another variable which has been related to the total income of older families. Kart, Longino, and Ullman (1984) studied economically advantaged families who had incomes more than double the poverty level for 1982. This group of advantaged individuals were 40 percent of all retired households in the United States at this time and were most often headed by married individuals. The Retirement History Survey researchers found the median income of married couples were considerably higher than either unmarried men and women (Friedman & Sjogren, 1981). Maxfield (1985), employing NBS data, found the median monthly income for married couples was double that of the unmarried respondents.

The educational level of a person has been associated with total income. Ryan and Maynes (1969) found that individuals with higher levels of education were more likely to receive higher total incomes than individuals with fewer years of education.

The gender of a retiree combined with marital status has also been shown to have a relationship to total income level in prior research. Friedman & Sjogren's (1981) analysis of the RHS survey revealed that unmarried women's median income was 40 percent lower than that of married men. The NBS researchers also found a relationship between gender, marital status, and total income for persons over 65 years old. The researchers found that unmarried men had received a lower median monthly income than married respondents. However, the median monthly income for unmarried men was still higher than

that of unmarried women. The 1981 median monthly income was $930 for unmarried women and $1,070 for unmarried men (Maxfield, 1985). The $140 difference between the two incomes was certainly not as great as the 40 percent difference recorded in the Retirement History Study. What this difference could signify was that the gap between unmarried men and women was narrowing between the times the RHS (1969 to 1979) and the NBS (1982) were administered. It could also signify problems in the research design. Research design problems include the issue that the Retirement History Survey was a longitudinal study and the median incomes were averaged over a longer time period unlike the New Beneficiary Study. This suggests that the effects of retirement may have become apparent in the RHS but not in the cross-sectional NBS.

Hogarth (1987), Ycas and Grad (1987), Moon (1986), Maxfield (1985), and Hamermesh (1984) have all researched the major sources of income and their importance to older families. The major sources of income to retired families were Social Security benefits, earnings, assets, and pensions.

Hogarth (1987) drawing from RHS data, indicated that the largest proportion of aggregate income came from Social Security benefits for families over 65, amounting to 40 percent of the total. In the NBS study (respondents aged 62 and older), unmarried women had 42 percent of their aggregate income provided by Social Security compared to 40 percent for unmarried men. Married couples had 34 percent of their aggregate income provided by Social Security (Maxfield, 1985). Thus, previous research has found a relationship between a

combination variable consisting of gender and marital status and the proportion of income from selected sources. Unmarried individuals received a greater portion of their income from Social Security benefits because they were less likely than married couples to have assets, pensions, or earnings as sources of income.

More recent research by Ycas and Grad (1987) explored the number of aged persons in the population who received Social Security benefits and its importance to the family income. According to their results, 91 percent of aged units (couples and single persons) received Security benefits in 1984. These Social Security benefits accounted for 38 percent of the aggregate income of all respondents and provided the majority of income for 62 percent of recipients. Social Security benefits were viewed as more important for lower income groups because these individuals were less likely to have alternate sources of income.

The second largest proportion of aggregate income was derived from assets (Hogarth, 1987; Maxfield, 1985). Using data from the RHS, Hogarth (1987) found that 22 percent of the aggregate income was from assets, while the NBS researchers reported a 20 to 23 percent proportion (Maxfield, 1985). The variables affecting assets will be discussed further in the last section of this literature review.

Research by Kart, Longino, and Ullman (1989), Hogarth (1987), and Ycas and Grad (1987) investigated the relative prevalence of earnings for older families who were receiving Social Security. In their research samples, retired persons

often moved in and out of the work force, continued temporarily or on a part-time basis, and this continued employment increased retirement income. In 1984, 21 percent of the aggregate income of aged persons came from employment earnings (Ycas & Grad, 1987).

Retirement age and marital status were significant variables in determining the percent of income from earnings (Maxfield, 1985). For those married individuals who retired at or after age 65, 23 percent of their aggregate income came from earnings. For married respondents who retired between age 62 to 64, 18 percent of their aggregate income came from earnings. For unmarried respondents who retired at or after age 65, 26 percent of their aggregate income was from earnings. This could be compared to the 10 percent of aggregate income for individuals who retired between age 62 and age 64.

The final source of income for older families were private and public pensions. Hogarth (1987) indicated that on average, 15 percent of the aggregate income for households with a member over 65 years old, was derived from pension income. Pension income may come from a variety of sources: private employer; union; public pensions from state, local and federal governments; military pensions; and railroad retirement benefits (Maxfield, 1985). This source of income has gained in importance recently because more employers are sponsoring private pension plans.

Marital status and gender were significant factors in determining pension benefits. According to the NBS, 53

percent of retired men received benefits, while only 24 percent of married women received pension benefits. The pension benefit rate for unmarried retired workers was two out of every five workers or 40 percent (Maxfield, 1985).

Age at which employer provided pension benefits were first received was a significant variable for women in the NBS research. Married individuals who retired at age 65 or older were more likely (36 percent) to receive pension benefits than married women who retired between 62 and 64 years of age (24 percent) (Maxfield, 1985).

CONSUMPTION AND INCOME

Although consumption was not part of this study, it has some relationship to the focus of the research. Consumption involves the spending of income to acquire goods and services. What is not spent for current or past consumption is savings and becomes part of the assets of a family. Since income, savings, and assets were topics researched in this study, some of the consumption literature seems relevant. Knowledge of older families consumption relative to income provides information as to whether these families have any savings or whether or not they spend all of their current income from all sources. Allan (1979) suggested that families over 65 require an income roughly 60 to 80 percent of their former income to maintain their living standards. Using information on the marital status and prior income level of families, Hefferan (1981) devised three wage replacement ratios. For example, a middle income couple would require 65 to 85 percent of their

pre-retirement income in order to maintain the same level of living. There were several reasons suggested for the adequacy of the lower replacement income. First of all, older families were less likely to have job related expenses because they were no longer working. Secondly, they were less likely to have children at home and the childrearing costs had decreased. Thirdly, they had accumulated assets over their life span and the returns of these assets could be used to subsidize incomes. Finally, the few tax incentives for older families reduced the amount of income necessary after retirement (Hefferan, 1981; Allan, 1979).

Tongren's (1988) research results indicated that even though the elderly had lower money incomes, they received extra benefits. Benefits such as lower income tax, medicare, mortgage-free housing, and discounts actually increased their spending power by 30% over younger households of similar size.

Ruffin (1989) focused on the effect of reduced income on the changes in consumption patterns. She suggested that consumption beyond income resources would place aged persons in fatal financial positions. She noted that consumption patterns were based on earlier consumer decisions and acquisitions. These established patterns often found older consumers in houses too big for their needs, spending a disproportionate amount of income on utilities and taxes, and spending large amounts of financial resources on medical care.

Hamermesh (1984), utilizing the RHS sample, found that in 1973 families who had no earnings from the previous year, consumed 14 percent more than their income (from pensions,

Social Security, and assets). That level of consumption could not be sustained for the entire expected life spans of the aged families because their resources would be depleted before their lives ended. However, he found that while the consumption to income ratio was very high at the onset of retirement, this ratio became negatively sloped as the couples aged. This indicated that as these retirees aged (two years later), their consumption level decreased.

Burton and Hennon (1980), Allan (1979), and Ruffin (1979) focused on expenditures of aging families. The largest per capita expenditures were on food and then utilities (Burton & Hennon, 1980; Allan, 1979). Other major expenditures items included: housing, medical care including prescription drugs, and health insurance. Unique to the 65 year old and over group, according to Allan (1979), were major expenditures on vacations, women's hair care, women's clothing (certain items), mobile homes, home care services, cigars and pipe tobacco, newspaper subscriptions, gifts, and contributions.

CREDIT

Research by O'Bryant and Morgan (1989), Tongren (1988, 1974), Danes and Hira (1986), Jensen and Reynolds (1986), and Garcia (1980) reported that older families did use consumer credit. Tongren (1974) results indicated that four out of every five families over 65 years old used some form of credit. The "majority of use" was confined to bank cards, department store cards, and oil company cards. The major purpose of credit was to acquire clothing, gasoline, household

furnishings and appliances, meals, lodging, entertainment, medical expenses, and home improvement (Tongren, 1974).

Age of the credit holder has been associated with several attributes of credit. First of all, Tongren's (1974) results indicated that the number of times credit sources were utilized decreased with age for respondents over 65 years. Tongren's results indicated that large numbers of people over 65 believed that debt carried a social stigma and that the payment of interest was a penalty for lack of thrift. Because of this stigma attached to credit and debt, his results revealed that people over 65 used credit less often. The number of credit cards that household members used was also negatively associated with age. As respondents (18 to 87) aged, the number of credit cards utilized decreased (Danes & Hira, 1986). Results from Jensen and Reynolds (1986) found an association between the use of any type of credit to age. Seventy-three percent of respondents 55 to 64 used credit compared to 48 percent of 65 to 94 year olds, indicating that as one grew older they were less likely to use any type of credit.

The majority of attention on consumer credit has focused on the relationship between credit use and income levels but the results have been inconsistent. Danes and Hira (1986), Jensen and Reynolds (1986), and Tongren (1974), all found a slightly different relationship between the amount of credit utilized and income. Danes and Hira (1986) reported that lower and middle income families had more experience with credit cards and loans than upper income families. The

results of Jensen and Reynolds (1986) indicated that the use of any type of credit increased as income levels increased. There was some evidence presented by Tongren (1974) that very low income and very high income individuals used credit less than middle income families.

Education was shown to have a positive relationship to credit use (Danes & Hira, 1986; Jensen & Reynolds, 1986; Garcia, 1980). The relationship suggested that any increases in formal education, such as the number of years spent in a school system, related to a higher number of credit cards utilized and to the increased use of any type of credit.

A review of the current literature could not find any previous studies which explored what the various purposes were for the sources of consumer credit. This would be useful in understanding whether credit is used to facilitate payment on luxury goods or on essential family goods and services. If it is used to assist in consumption of basic goods and services when savings were low, researchers would know that families risk financial hardships. This would provide professionals who work with older families with information on the well-being of older families.

Household financial management practices, including how a family used credit, was the basis of research by Danes and Hira (1986). Many times, how a family uses credit (number of times they pay the minimum balance or pay finance charges) provides an explanation about the financial status of a family. The research undertaken by Danes and Hira (1986) studied the credit practices of older families. The

researchers were interested in finding what variable was the best determinant of how credit was used. The results indicated that the number of credit cards used by the household explained more about credit practices than did the frequency of paying finance charges.

DEBT

Household debt was defined in this research as the debt acquired from consumer credit (bank and credit union loans, credit cards, finance companies, family, friends, and pawn brokers) and real estate. Older families with large debts might have difficulties paying these debts when their incomes had decreased after retirement. The future obligation to debt payments and finance charges could jeopardize the financial well-being of some families.

The past decade has seen an increasing proportion of a family's disposable income used to pay off consumer debts (Hayes, 1989; Christelow, 1988; Paquette, 1986; Kinsey & Lane, 1978). Previous researchers have found a significant relationship between specific variables and the amount of debt or the incidence of debt in aged persons.

Several researchers have found a negative relationship between income and debt (Caplovitz, 1987; Ryan & Maynes, 1969). The relationship established was that increases in income decreased the probability of having large total debts.

The age of the individual or stage in the life cycle also corresponded to a negative relationship with debt (Christelow, 1988; Freidman & Sjogren, 1981). Results indicated that as

families or individuals reached age 65 or older, the total amount of debt decreased. In these studies, age however was not directly tied to employment status; therefore there can be no generalizations about the relationship between age at which one retires and the amount of debt that one sustains.

There was one piece of older research that contradicted the life cycle-debt relationship (Ryan & Maynes, 1969). The study indicated that the greatest proportion of all people holding debt were those under 25 or 65 years or older. These households at extreme ends of the life cycle formed a curvilinear relationship between age and debt because of the higher total amount of debt. The results of Ryan and Maynes (1969), however have not been substantiated by any other researchers.

Education is another variable that has been shown to have a negative relationship to the possibility of incurring large total debts (Caplovitz, 1987; Ryan & Maynes, 1969). As the number of years of formal education rose the possibility of having a higher amount of debt decreased.

Family size has also shown a relationship to the total debt of a family. A positive relationship was found in the relationship between personal debt and family size. According to research by Bryant (1986), and Kinsey and Lane (1978), families with many dependents were more likely to have higher total debts compared to smaller families. This suggests that aging families who no longer have any dependent children would likely record small amounts of debt.

Finally, marital status and gender have been

significantly associated with debt. According to research, older married couples were likely to have low total debts, while unmarried women were most likely to have higher total debts (Ruffin, 1989; Sherman, 1985; Kinsey, 1978). In particular, when women became widows there were greater changes of total debts increasing (Ruffin, 1989; Lopata, 1979). The reasons why unmarried women or widows were prone to debt were numerous: including the lack of experience in dealing with financial matters, the unavailability of assets and pensions, and usually a shorter work history than married men. Because the widows and unmarried women probably had lower incomes and lower savings, the chances of these women acquiring loans to purchase goods and services increased.

In summary, previous researchers have found a relationship between income, age, education, family size, marital status, gender, and debt. Some researchers have focused on the debt among older families. Sherman (1985) stated that less than one-third of families headed by an individual aged 65 to 74 had consumer debt and the median debt was less than $1,000. Studying an older group, 75 or older, Sherman (1985) found that only 15 percent had consumer debt and the median amount was $300. This consumer debt included credit cards, open end debt, installment debt, and non-installment debt. Sherman's (1985) findings concurred with research using the Retirement History Survey: older individuals had little or no debt and the amount of debt decreased as individuals aged (Friedman & Sjogren, 1981).

DEBT-TO-INCOME RATIOS

Previously, ratio analysis has been commonly used to diagnose solvency in business firms. Recently, there has been increased interest in using ratio analysis with families to assess their financial status.

There has been little previous research focusing on the relationship between age and the household debt-to-income ratio. Prather (1990) and Mason and Griffith (1988) reviewed the numerous ratios used in analyzing family financial statements and their significance for financial planners and counselors in gaining a better understanding about families finances. They stated that ratios were useful when attempting to find out the financial strengths and weaknesses of families. The ratios, according to the researchers, could be used as a tool to better "manage financial resources, to develop effective spending patterns consistent with consumption and to guard against excessive use of debt" (Mason & Griffith, 1988).

Any ratio according to Mason and Griffith (1988) must be considered in the context of each client's situation. They considered five factors important to evaluating ratios. The factors were: 1) the stage of the life cycle-the three stages of the financial life cycle were either accumulation, preservation, and distribution, 2) family status-married, widowed, divorced, or single parent, 3) economic status-income levels and occupations, 4) economic environment-business cycles and portfolio mix, and 5) client objectives and preferences-values and beliefs which affect the family

financial decisions. All of these five factors were considered necessary to interpreting financial ratios. The ratios can then be either predictive or diagnostic.

According to Mason and Griffith (1988), as a family aged, the debt-to-income ratio would decrease. The decreases achieved in the ratios by older families would indicate that less of a family's income was obligated to debt.

Other researchers have estimated the disposable personal income-to-debt ratios and debt-to-asset ratios (Christelow, 1988; Paquette, 1986; Kinsey & Lane, 1978). Paquette (1986) studied aggregate national accounts on households of all ages. She concluded that by the end of the fourth quarter of 1985, the mean estimated ratio of consumer installment debt to disposable personal income was .17. The ratio of home mortgage and consumer installment debt to disposable personal income at that time was .68. Christelow (1988) stated in her results that the consumer debt to disposable income ratio was about 20 percent in 1985. Kinsey and Lane (1978) attempted to explain why there was an increase by households in the amount of aggregate consumer debt in comparison to liquid assets. Kinsey and Lane (1978) stated that more families valued obtaining the goods and services immediately. If the convenience was greater than or equal to the finance charges administered, more families would acquire more debts and they would have higher debt-to-income ratios.

To conclude this review section, it is necessary to consider two problems of previous research studying debt and incomes. The first problem is the nature of the research.

The majority of this review was derived from two studies. The first study was the longitudinal Retirement History Survey collected by the Social Security Administration from 1969 to 1979, bi-annually. The respondents ranged in age from 58 to 63 in the initial interview and the majority had retired by the time of the last interview in 1979. The second major study reviewed quite extensively was the New Beneficiary Study. This was also administered by the Social Security Administration from June 1980 to May 1981. Included in this cross sectional study were persons who received retired worker benefits at age 62 or older. The problem with basing the majority of the review on these two pieces of research is that there is little to compare them to and their inherent research limitations must be accepted.

For instance, reasons to be cautious in making comparisons between the two studies are that their research designs are different. The RHS was a longitudinal study while the NBS was a cross sectional study. Ruffin (1989), and Ycas and Grad (1987) have recognized the biases inherent in these types of studies. The newly retired worker data in the NBS was skewed because this sample had not yet suffered from changes in health, inflation, earning capacity, death of spouse, and the negative consequences of such non-indexed benefits, as private pensions, which would all affect debt, income, and assets. This inability to capture these changes biases some of the income and asset figures and makes them appear higher than any longitudinal study, such as the Retirement History Survey (Ycas & Grad, 1987). Longitudinal

studies according to Ruffin (1989) showed lower real incomes and increased incidence of poverty for older consumer units as members aged.

The second major limitation is due to the human nature of questionnaire respondents. Schulz (1985) outlined several characteristics of respondents which affected the accuracy of results. First of all, respondents have trouble remembering exact financial information, do not know, refuse to answer, or provide false information on surveys. A second problem Schulz (1985) uncovered was that higher income groups tended to underestimate their incomes from interest, dividends, rent, royalties, trusts, and self employment income. This underestimation would make researchers believe that the difference between low and high income individuals was not as wide as recorded. Finally, the third problem deals directly with older persons filling out surveys. Schultz (1985) discussed how older families with a person over 65 tended to underestimate any problems because of the nature of their cohort. Their life experiences (ie. the 1930 's depression) have all been difficult and the nature of any present financial problems may appear insignificant to those past experiences. If these individuals underestimate debt, results will be inaccurate.

ASSETS

The total amount and the total number of types of assets of older families has been previously investigated, along with the amount of liquid assets. Liquid assets are often used to

supplement incomes after retirement. Families with a higher total number of assets are more able to maintain the living standards they had prior to retirement.

Initially, this section will explore the Life Cycle Hypothesis, then the major types of assets and their importance to the family's financial status will be discussed. Thirdly, a review of the variables that affect assets will be outlined. Finally, a description of the amounts of asset holdings will be discussed.

The Life Cycle Hypothesis of Albert Ando and Franco Modigliani (1963) attempted to explain savings and consumption over a person's life. The hypothesis stated that an individual wishes to spread his lifetime income in such a way as to provide a constant level of consumption. An individual will do this by using savings acquired through their work years to smooth out consumption over an extended period of retirement. The process of liquifying personal and liquid assets to provide a source of income is called dissaving. An individual's current consumption is then dependent on three things: current income, savings, and the expected pattern of future income.

The Life Cycle Hypothesis of Saving relates to older families because it assumes they consume at a level they think can be maintained throughout the life span. The family presumes that there would be no major changes to their financial status. This fits into the asset section for two reasons: If a family does not have any liquid or personal assets to liquify, they will have less opportunity to

supplement their consumption and survival. Secondly, if older families have assets, but they are liquified at a rate faster than can be sustained over their actual life spans, they would suffer financial difficulties (Hogarth, 1988).

The amount of dissaving that older families actually experience was researched by Hogarth (1988) and Davies (1981). Davies' (1981) results indicated that individuals from 65 to 85 years old dissaved at an annual rate of 2.9 to 3.7 percent. This rate was significantly lower than the Life Cycle Hypothesis, which proposed a rate of 7 to 9 percent. Even though some dissaving occurred, Hogarth's (1988) results indicated that 50 percent of retired households continued to save and build assets in retirement.

Maxfield (1985), Sherman (1985), and Friedman and Sjogren (1981) examined the types of assets held by older individuals in the RHS and the NBS. Friedman and Sjogren (1981) grouped the assets into five categories. These five categories were: 1) total assets-the aggregates of equities in all assets, 2) home equity-the value of the home less the mortgage, 3) liquid assets-savings, checking stocks, bonds, mutual funds, 4) illiquid assets-equities in business, professional practices and real estate, and 5) insurance policies and annuities. Mandese (1989) suggested that people over 50 years old had 77 percent of all the financial assets in the United States. In the RHS, 90 percent of the respondents owned assets of some form (Friedman & Sjogren, 1981).

Asset ownership was related to the marital status and gender of an individual according to the research in the NBS

and the RHS (Maxfield, 1985; Sherman, 1985; Friedman & Sjogren, 1981). The proportion of married men owning assets was higher than unmarried individuals in the NBS and the RHS. In the NBS, 83 percent of married retired respondents and spouses reported asset income while 72 percent of unmarried women and 63 percent of unmarried men reported asset income (Maxfield, 1985). There were suggestions made about why married respondents had more asset income. The first reason, based on the Life Cycle Hypothesis of Saving, was that an individual whose lifetime income was high would accumulate more assets than another whose income was lower. Since married couples have been shown to have a higher total income because of the two sources of earnings, this higher income would allow for the possibility of more assets holdings and higher asset accumulation. Since unmarried individuals only have one source of income and the possibility for less assets holdings and asset accumulation, they would more likely receive less income from assets than married couples.

Another variable that has shown a positive relationship to total assets is age. In the NBS survey, the 62 to 64 year olds were compared to the 65 and older group. The results consistently indicated that for every type of asset (financial, property, and home ownership), the 65 and older group owned a wider variety of assets than the 62 to 64 year age group. It should be noted however that this survey studied those who had most recently retired and did not consider the effects of years of retirement and the degeneration of assets (Sherman, 1985).

Friedman and Sjogren (1981), using the same data as Hamermesh (1984), indicated that the majority of retired persons had little or no assets to liquidate. A small fraction of the respondents, 4 to 5 percent had assets exceeding $100,000 and another 8 to 9 percent had between $50,000 to $100,000 in assets. Since the majority of people had less than $50,000, the results did suggest very few families had the option of liquefying their assets since the majority of that $50,000 would be the equity in their houses.

The NBS and RHS researchers both summarized the amount of assets held by individuals. The RHS recorded assets in the 1969 to 1979 period for couples and unmarried men and women. Friedman and Sjogren (1981) recorded results from the RHS as follows: 77 percent of RHS respondents had some form of liquid assets and 27 percent of respondents had illiquid assets in 1969. In 1975, 81 percent owned some form of liquid assets and 24 percent owned illiquid assets in 1975. In 1969, 77 percent of married men owned a home compared to 42 percent of unmarried men and 41 percent of unmarried women. These percentage figures all increased for 1975, when 82 percent of married men, 51 percent of unmarried men, and 46 percent of unmarried women owned homes. According to all the research previously outlined, there is a positive relationship between age and home ownership up to age 71.

The NBS survey explored individuals aged 62 and older using 1980 and 1981 figures. Sherman (1985) found that 92 percent of married and retired couples had a savings,

checking, or credit union account, and 74 percent of unmarried men and 85 percent of unmarried women had these forms of liquid assets. For all other types of financial assets (certificates of deposit, money market accounts, stocks, bonds, IRA, and Keoghs), couples were more likely to own these than unmarried men and women. The median value for all financial assets was $15,000 to $18,000 for couples compared to $8,800 for unmarried men and $7,500 for unmarried women.

Home ownership rates were higher in the NBS than the RHS sample for all categories. NBS results indicated that 87 percent of married retired workers were homeowners, compared to 48 percent of unmarried men and 58 percent of unmarried women. The definition of home ownership included respondents who owned their homes with or without mortgages.

In reviewing the asset holdings of older individuals it is important to recognize once again the differences between the RHS and the NBS. The respondents in the NBS survey (1980 to 1981) were slightly better off than the 58 to 63 year olds in the RHS (1969 to 1979). This was shown by the fact that a greater percentage of them owned homes, had worked in a period with higher wages, and had experienced increased participation of women in the labour force. The NBS respondents also had more incentives for asset accumulation due to tax benefits (Ycas & Grad, 1987; Sherman, 1985).

SUMMARY

Past research on income, credit, debt, debt-to-income ratios, and assets of 55 year olds and older has not been a primary research focus in the economics and social science fields. However, some research has found significant variables which related to the credit use of older families. Research based on two major studies, one cross sectional and one longitudinal, has examined income, debt, and assets of older families but the results were sometimes dissimilar.

Studies have found that income, credit, debt, and assets relate to age, marital status, gender, education, household size, and employment status. This researcher attempted to further analyze information about age categories and the traditional financial status variables of families in addition to exploring debt-to-income ratios of older families.

Chapter 3

RESEARCH DESIGN AND METHODOLOGY

This research study was descriptive focusing on financial aspects of financial managers age 55 and over employing data gathered in the 1988 Family Economic Well-Being Survey[1] (See Appendix A). This survey investigated the economic well-being of households in two rural counties in Michigan. The survey instrument included a range of topics. These topics included how the household finances were handled, financial problems, credit, personal perceptions about the community, perception of change in the family's financial condition, employment, income, assets, debt, satisfaction with family relationships, community resources, and questions about retirement. The data collected on credit, income, debt, and assets were analyzed in this study.

SAMPLE SELECTION PROCEDURES

The researchers wanted to compare the economic characteristics of rural households in an economically

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[1] Preparation of this report was supported in part by the Michigan State Agricultural Experiment Station. Data were collected in conjunction with the cooperative regional research project NC-182, Family Resource Utilization as a Factor in Determining Economic Well-Being of Rural Families.

growing/sustaining county to those in a declining county. The counties were defined as rural if at least 10 percent of their population were employed in fishing, agriculture, livestock, forestry, or mining. Out of the 83 counties in Michigan, 24 met this criterion. The economically growing/sustaining or declining county was selected if it was in the top or bottom quartile, respectively, of counties ranked by size of positive change in per capita income between 1979 and 1985. Missaukee was randomly selected from the top quartile and Presque Isle was randomly selected from the bottom quartile. Presque Isle had the highest proportion of its population meet the criterion for rurality (21 percent) in 1979 (1980 Census). Missaukee was third highest with 16 percent. Presque Isle had the lowest percent increase in per capita income between 1979 and 1985 (27 percent) and Missaukee had the third highest (36 percent). Thus Presque Isle represented a more slowly growing county compared to Missaukee.

DATA COLLECTION

Data collection for The Family Economic Well-Being Study started in the late spring of 1988. A random selection of households in the counties was performed by the R.L. Polk Company. At this time, a total of 900 questionnaires were sent to the two counties, Presque Isle and Missaukee. Each household selected was mailed two questionnaires. The white questionnaire was given to the primary financial manager in the household and a yellow questionnaire was to be filled out

by the other adult member in the household. Each household was to decide which person was the primary financial manager. Enclosed with each questionnaire packet was a letter of explanation about the study. The packet also included a self addressed envelope with pre-paid postage. Each respondent was to complete the questionnaire individually and then both questionnaires were sent back to the researchers.

Specific follow up procedures were used to encourage a high rate of return including an incentive program. A follow up post card was sent out after the first questionnaire. The final follow up included a redistribution of questionnaires to all the households who had not filled out their questionnaires within a certain time period. Fifty-five questionnaires were returned unusable either due to incorrect addresses or because health problems prevented the respondents from filling out the questionnaire. Out of the remaining 845, 281 (33%) were completed and returned during the summer of 1988 for analysis. Of the 281 primary financial managers responding for this study, 143 cases were selected because they met the age criteria of 55 years or older.

RESEARCH QUESTIONS AND HYPOTHESES

The following questions and hypotheses were developed from the objectives, review of literature, and the information available in the Family Economic Well-Being Survey. The questions and hypotheses will be divided into five sections. Each section will begin with several general research questions. Then the null hypotheses will be stated, followed

by the working hypotheses.

INCOME

Question 1: What percentage of respondents, 55 to 64, and 65 and older, had each of the following sources of household income: wages or salary from a job, own business, savings interest, investments, pensions, alimony, spousal maintenance, child support scholarships for education, gifts from family, Social Security, Aid to Families with Dependent Children, General Assistance, Supplemental Security Income, Worker's Compensation, farm support programs, rental income, or other?

Question 2: What percentage of respondents, age 55 and over, received each source of household income by retirement status?

Question 3: What were the mean, median, and range of the total number of household income sources for respondents age 55 to 64, 65 and over, and for the entire older respondent sample?

Question 4: What were the mean, median, and range of the total amount of household incomes for respondents', age 55 to 64, and 65 and older?

Question 5: What were the mean, median, and range of the total amount of household incomes by respondents' retirement status?

In the data analysis, the percentages and ranges were found by using descriptive statistical analysis. The measures of central tendency employed were the mean and median. The mean total household income was calculated by adding the code for the total household income categories of all the respondents divided by the total number of respondents. The median household income was measured as the middle category where 50 percent of the respondents recorded total incomes either above or below the category.

Hypothesis 1: Among respondents age 55 and over, there is no relationship between total amount of household income and two age categories (55 to 64, 65 and older).

Working Hypothesis 1: A higher percentage of respondents in the younger age category (55 to 64), will be in the higher total income categories than will older respondents (65 and older).

The rationale for this working hypothesis was derived from the research by Ruffin (1989). The research findings indicated that younger individuals had higher incomes because they are more likely to be employed. The Chi-square test of independence was used in the statistical analysis.

Hypothesis 2: Among respondents age 55 and over, there is no relationship between age categories (55 to 64, 65 and over) and the total amount of household income holding marital status constant.

Working Hypothesis 2: A higher percentage of married respondents in the younger age category (55 to 64) will record higher total income categories than older married or not married respondents.

The rationale for this working hypothesis was developed from the research results of Maxfield (1985), Kart, Longino and Ullman (1984), and Friedman and Sjogren (1981). The research indicated that younger married couples had higher total incomes than older married couples and that married couples had higher incomes than unmarried respondents. The Chi-square test was used to determine whether age category and total income were independent, with marital status held constant.

Hypothesis 3: There is no relationship between age categories (55 to 64, 65 and over) and the total amount of household income holding marital-gender constant for all respondents 55 and over.

Working Hypothesis 3: A higher percentage of respondents in the younger age category (55 to 64) who are male or female and married will record higher total income categories. Unmarried women in the older age category will record the highest percentage of respondents in the lowest total income category.

This hypothesis was derived from the research results of Maxfield (1985). The results indicated that unmarried women in the older age category had the lowest total median monthly income of $930. In comparison, married respondents in the younger age category had the highest total median monthly household income of $1,410. The Chi-square test of independence was used to test for a relationship between total household income and marital gender.

Hypothesis 4: Among respondents 55 and over, there is no association between age categories (55 to 64, 65 and over) and the total amount of household income holding education constant.

Working Hypothesis 4: A higher percentage of respondents in the younger age category (55 to 64) with higher education levels will record higher incomes categories than older respondents with higher education levels. Respondents in the older category with lower levels of education will record the highest percentage of respondents in the lowest total income category.

This working hypothesis was derived from the results of Ryan and Maynes (1969) who found that persons with higher educational levels had higher total incomes. The Chi-square test of independence was used in the analysis.

Hypothesis 5: Among respondents 55 and over, there is no relationship between retirement status and total amount of household income.

Working Hypothesis 5: A higher percentage of respondents who are retired will record lower total household income categories than not retired respondents.

The rationale for the working hypothesis came from the research results of Ruffin (1989), Friedman and Sjogren (1981), and Hefferan (1981). The withdrawal from the labor force was seen as the primary cause for the reduction of income. Variables were tested for their independence using the Chi-square test.

Hypothesis 6: There is no association between retirement status and the total number of household income sources utilized by respondents age 55 and older.

Working Hypothesis 6: A higher percentage of respondents who have retired will record more household income sources than not retired individuals.

This working hypothesis was developed from the results of Tongren (1988), Hogarth (1987), Moon (1986), Maxfield (1985), Hamermesh (1984), and Freidman and Sjogren (1981). The results indicated that older families received income from more sources because several sources were not available to younger families such as Social Security and pensions. The Chi-square test of independence was used in the analysis.

CONSUMER CREDIT

Question 1: What percentage of respondents' families age 55 to 64, and 65 and older use credit? What percentage use credit cards, banks, credit unions, finance companies, pawn brokers, or receive credit from friends, or family?

Question 2: What were the mean, median, and range of the total number of credit sources used by respondents age 55 to 64, and 65 and over?

Question 3: What percentage of respondents 55 and older, made only minimum payments on charge cards, paid interest on credit cards, and worried about money to pay bills?

In the data analysis, these frequencies and ranges were found by using descriptive statistical techniques. Measures of central tendency, including means and medians, were calculated. The mean number of credit sources used was found by adding the total number of credit types used by all respondents and then dividing the sum by the number of respondents. The median number of credit types used was the central value where 50 percent of the sample had either higher or lower values.

Research Question three was developed from the research of Danes and Hira (1986) who explored the relationships among knowledge of credit, attitude toward credit, and credit practices. The question was included to explore the money and credit management behavior of this older sample.

Hypothesis 1: Among respondents 55 and over, there is no association between age categories (55 to 64, 65 and over) and the total number of credit sources utilized.

Working Hypothesis 1: A higher percentage of younger age respondents (55 to 64) will report a higher total number of credit sources utilized than respondents in the older age category.

The explanation for the working hypothesis was based on the research findings of Danes and Hira (1986), Jensen and Reynolds (1986), and Tongren (1974). Their results indicated

that as the head of the household got older, the use of credit (number of times, number of credit cards, and use of any type of credit) decreased. The independence of this association was tested using the Chi-square test of independence.

Hypothesis 2: There is no association between age categories (55 to 64, 65 and over) and the total number of credit sources utilized holding constant total income.

Working Hypothesis 2: A higher percentage of younger respondents (55 to 64), in the highest income category will record the highest total number of credit sources compared to older respondents in higher income categories.

The explanation for this working hypothesis was derived from the results of Jensen and Reynolds (1986) and Tongren (1974). The results indicated that individuals with higher incomes utilized a larger number of credit sources. These results coupled with the results indicating that as the head of the household got older, the use of credit decreased formed the basis for this hypothesis. The independence of this association was tested using the Chi-square test.

Hypothesis 3: There is no association between total number of credit sources utilized by retirement status for all respondents 55 and over.

Working Hypothesis 3: A higher percentage of not retired respondents will record a higher total number of credit sources compared to retired respondents.

This working hypothesis was developed from the results of Danes and Hira (1986), Jensen and Reynolds (1986), and Tongren (1974). The results indicated that older families were less likely to use credit and it is expected that retired

individuals are more likely to be older. The Chi-square test of independence was used to test the relationship.

Hypothesis 4: Among respondents 55 and over, there is no association between age categories (55 to 64, 65 and over) and the total number of sources of credit holding education constant.

Working Hypothesis 4: A lower percentage of respondents in the older age category (65 and over) with higher education levels will record a higher total number of sources of credit compared to younger respondents with high levels of education.

The justification for this working hypothesis was drawn from the results of Jensen and Reynolds (1986) and Garcia (1980). Their research indicated that individuals with higher educational levels had a higher total number of sources of credit. The Chi-square test of independence was use to measure from an association.

DEBT

Question 1: What percentage of respondents, age 55 to 64, and 65 and older, had each of the following types of household debt: mortgage on own home, mortgage on rental property or other home or real estate, automobile or other vehicle loan, credit card, home improvement loan, education loans, doctor, dentist, nursing home bills, loans owed to friends or family members and other?

Question 2: What were the mean, median, and range of the total amount of household debt for respondents, age 55 to 64, 65 and older, and for the entire group of respondents?

Question 3: What were the mean, median, and range of the total amount of household debts by respondents retirement status.

In the data analysis, the percentages and ranges were calculated by using descriptive statistical analysis.

Measures of central tendency such as the mean and median were calculated. The mean total debt category was calculated by adding the code for the total debt categories for all the respondents and dividing the sum by the total number of respondents. The median was the central category where half of the sample recorded either higher or lower total debt categories.

Hypothesis 1: Among respondents age 55 and over, there is no association between age categories (55 to 64, 65 and over) and the total amount of household debt.

Working Hypothesis 1: A higher percentage of older respondents (65 and over) will record total household debts in the lowest category compared to younger respondents (55 to 64).

This working hypothesis was developed from the research of Christelow (1998) and Freidman and Sjogren (1981). The results indicated that as families reached age 65 or as they got older, the total amount of debt decreased. The Chi-square test of independence was used to measure this association.

Hypothesis 2: Among respondents age 55 and over, there is no association between age categories (55 to 64, 65 and over) and the total number of types of household debt.

Working Hypothesis 2: A higher percentage of respondents in the younger age (55 to 64) category will have a higher number of types of household debt compared to older respondents.

This working hypothesis was derived from the research results of Tongren (1974). Older individuals had a smaller number of sources of household debt. The Chi-square was used

Hypothesis 3: Among respondents age 55 and over, there is no association between age categories (55 to 64, 65 and over) and the total amount of household debt, holding marital-gender constant.

Working Hypothesis 3: A higher percentage of unmarried female respondents in the older age category (65 and over) will record the highest amount of total household debt compared to unmarried men in the same age category. A larger percentage of younger, married, males or females will record the highest total amount of household debt compared to older married respondents or unmarried respondents.

The explanation for the working hypothesis was drawn from the results of Ruffin (1989), Sherman (1985), and Kinsey (1978). Their results indicated that older unmarried women had a greater chance of having a higher total household debt. In particular, older widows experienced greater debt. This association was tested using the Chi-square test of independence.

Hypothesis 4: Among respondents over 55 years old, there is no association between the total amount of household debt and age categories (55 to 64, 65 and over) holding household size constant.

Working Hypothesis 4: A higher percentage of respondents in the younger age category (55 to 64) who have more members in their household will report higher total amounts of household debt than others.

This working hypothesis was developed from the research results of Bryant (1986) and Kinsey and Lane (1978). They found a positive relationship between personal debt and household size; families with more family members recorded higher total debts. Also, the relationship between older families having no children at home reduces the likelihood of total amount of debt. The Chi-square test was used to test

the relationship between the two variables.

Hypothesis 5: Among respondents 55 and over, there is no association between retirement status and the total amount of household debt.

Working Hypothesis 5: A higher percentage of respondents who are retired will record a lower total amount of household debt compared to respondents who have not yet retired.

This hypothesis was generated from the results of Christelow (1988), Sherman (1985) and Freidman and Sjogren (1981). These researchers indicated that as a person aged their total amount of debt decreased. A Chi-square test was used to test the independence of these two variables.

Hypothesis 6: Among respondents over 55 years old, there is no association between total number of types of debt by retirement status.

Working Hypothesis 6: A lower percentage of retired respondents will record the highest total number of sources of household debt than will not retired respondents.

The hypothesis was derived from the results of Freidman and Sjogren (1981). Retired individuals recorded a smaller total number of sources of household debt. The relationship between the two variables was tested using the Chi-square test of independence.

DEBT-TO-INCOME RATIO

Question 1: What were the mean, median, and range of debt-to-income ratios for respondents age 55 to 64, 65 and older, and for all the respondents over 55?

Question 2: What were the mean, median, and range of debt-to-income ratios by retirement status?

In the data analysis, the percentages and ranges were found by using descriptive statistical analysis. The measures of central tendency were measured as the mean and median. The mean household debt-to-income ratio was calculated by adding all the ratios of all the respondents and dividing the sum by the total number of respondents. The median ratio was calculated as the middle value where 50 percent of the sample had values above or below the ratio.

Hypothesis 1: Among respondents 55 years old and over, there is no association between age categories (55 to 64, 65 and over) and respondents debt-to-income ratios.

Working Hypothesis 1: A higher percentage of respondents in the older age category (65 and over) will report lower debt-to-income ratios than will younger respondents.

The rationale for this working hypothesis was derived from the research results of Mason and Griffith (1988). The researchers stated that the ratio grew smaller as people aged. The Chi-square test was used to measure the relationship between the two variables.

Hypothesis 2: Among respondents 55 and over, there is no association between retirement status and debt-to-income ratios.

Working Hypothesis 2: A higher percentage of retired respondents will record lower debt-to-income ratios than not retired families.

This working hypothesis was derived from the research on debt. Sherman (1985) and Freidman and Sjogren (1981) found that older families had a smaller total amount of debt than younger households. This would affect the debt-to- income

ratio by making it smaller. The Chi-square test of independence was used to measure the independence of the two variables.

Hypothesis 3: Among respondents 55 and over, there is no relationship between age categories (55 to 64, 65 and over) and debt-to-income ratios holding household size constant.

Working Hypothesis 3: A larger percentage of respondents with larger families in the younger age category (55 to 64) will have higher debt-to-income ratios than older respondents.

This hypothesis was derived from research on total family debt. Bryant (1986) and Kinsey and Lane (1978) found that larger families had a greater amount of debt and that younger families were more likely to have more people in the household. The Chi-square test of independence was used to test for an association.

Hypothesis 4: Among respondents over 55, there is no relationship between age categories (55 to 64, 65 and over) and debt-to-income ratios holding education constant.

Working Hypothesis 4: A higher percentage of older respondents (65 and over) in the higher education category will record lower debt-to-income ratios than others.

The explanation for this working hypothesis was derived from the research on income and debt. The research results of Ryan and Maynes (1969) indicated that respondents with higher of levels of education had lower total debt. This result coupled with the findings that increases in income were associated with increases in education would lead to an expectation that the debt-to-income ratio would be smaller

for educated, older respondents. The variables were tested using the Chi-square test of independence.

Hypothesis 5: There is no relationship between age categories (55 to 64, 65 and over) and the debt-to-income ratio holding marital-gender constant.

Working Hypothesis 5: A higher percentage of male or female, married respondents in the older age category will have lower debt-to-income ratios than will younger male or female, married respondents. Not married women in the older age category will record the highest percentage of individuals with the highest debt-to-income ratio.

The explanation for this hypothesis was drawn from the research of Friedman and Sjogren (1981). Their results indicated that older married respondents had the lowest debts and that older single women were more likely to have higher amounts of debt. The Chi-square test of independence was used to measure the independence of the two variables.

ASSETS

Question 1: What percentage of respondents 55 to 64, and 65 and older, held the following household assets: own home, second home, vacation home, any vehicles, checking account, savings account, certificate of deposit, stocks or mutual funds, IRA, KEOGH, 403b funds or other?

Question 2: What were the mean, median, and range of the total value of household assets for respondents 55 to 64, and 65 and older?

Question 3: What were the mean, median, and range of the total value of household assets by retirement status?

Question 4: What were the mean, median, and range of the total number of asset types held by retirement status?

The percentages and ranges were found by using descriptive statistical analysis. The measures of central

tendency were the mean and median. The mean household assets was the sum of the code for the total household assets category for all of the respondents divided by the total number of respondents. The median household assets category was the middle category where half of the respondents had a value higher or lower than this category.

Hypothesis 1: Among respondents 55 and over, there is no association between age categories (55 to 64, 65 and over) and the total value of household assets.

Working Hypothesis 1: A lower percentage of respondents in the older categories (65 and over) will record the highest total value of household assets than will younger respondents (55 to 64).

The rationale for this hypothesis was based on Life Cycle Hypothesis of Saving (Ando & Modigliani, 1963). This theory presumes that as people get older they will dissave and the total value of their assets will decrease. The Chi-square test of independence was used to test the variables.

Hypothesis 2: Among respondents age 55 and over, there is no relationship between age categories (55 to 64, 65 and over) and the total number of types of household assets.

Working Hypothesis 2: A higher percentage of respondents in the older age category (65 and over) will report a higher total number of types of household assets.

The explanation for this hypothesis was based on the research data of Sherman (1985) and Friedman and Sjogren (1981). Their results indicated that as people aged they were more likely to have a greater total number of asset types. The test of independence, Chi-square was used on these two variables.

Hypothesis 3: Among respondents 55 and over, there is no relationship between age categories (55 to 64, 65 and over) and the total value of household assets holding marital-gender constant.

Working Hypothesis 3: A higher percentage of younger married respondents (55 to 64) will record a higher total value of household assets compared to the older respondents (65 and over). The highest percentage of respondents recording the lowest total value of assets will be not married women in the older age category.

The rationale for this working hypothesis was developed from the research findings of Friedman and Sjogren (1981) and Sherman (1985). Both studies indicated that married couples had higher mean numbers of total household assets than unmarried individuals and unmarried women had the least amount. The Chi-square test of independence was used to test the independence of the two variables.

Hypothesis 4: Among respondents age 55 and over, there is no association between the total value of household assets by retirement status.

Working Hypothesis 4: A lower percentage of retired respondents will report the highest total value of household assets than will not retired respondents.

This hypothesis was also based on the Life Cycle Hypothesis of Saving (Ando & Modigliani, 1963) and Hogarth's (1988) observations. Retired families reported lower total values of assets because they had been dissaving. This relationship was measured using the Chi-square test of independence.

Hypothesis 5: Among respondents 55 and over, there is no relationship between the total number of types of household assets held by retirement status.

Working Hypothesis 5: A higher percentage of retired respondents will report a higher total number of sources of household assets than not retired respondents.

This working hypothesis was derived from the research of Sherman (1985) and Friedman and Sjogren (1981). Their results indicated that the total number of sources of assets increased as an individual progressed to retirement. The Chi-square test of independence was used to test the independence of the two variables.

OPERATIONAL DEFINITIONS

The operational definitions will be broken down into two major groupings: the dependent variables, and the independent variables.

DEPENDENT VARIABLES

SOURCES OF HOUSEHOLD INCOME: Respondents were asked to circle the various sources of household income received by any household member. The possibilities were: wages and salary, your own business, savings interest, investments, pension, alimony and spousal maintenance, child support, scholarships for education, gifts from family, Social Security (survivors, disability, retirement), Aid to Families with Dependent Children, General Assistance, Supplemental Security Income, Workers Compensation, farm support programs, rental income and others.

TOTAL NUMBER OF INCOME SOURCES: By adding together each of the various number of income sources for the household, the

total number of income sources was computed, ranging from 0 to 15.

TOTAL HOUSEHOLD INCOME: The survey instrument specified household income as the 1987 total dollar amount of income before taxes. Respondents were to select one of the following categories: 1) less than $5,000 2) $5,000 - $9,999 3) $10,000 $14,999 4) $15,000 - $19,999 5) $20,000 - $24 999 6) $25,000 - $29,999 7) $30,000 - $34,999 8) $35,000 - $39,999 9) $40,000 - $44,999 10) $45,000 - $49,999 11) $50,000 - $59,999 12) $60,000 - $69,999 13) $70,000 - $79,999 14) $80,000 - $99,999 and 15) $100,000 and over. The mean total income category was computed by adding all of the respondents total income codes together and dividing by the number of respondents. The median total household income was the midpoint category where half of the respondents either had higher or lower values.

SOURCES OF CREDIT: The survey instrument specified the sources of consumer credit that the family normally used, excluding mortgage and/or business credit. Credit sources were loans received from credit cards, banks, credit unions, finance companies, pawn brokers, friends, and family.

TOTAL NUMBER OF CREDIT SOURCES UTILIZED: By adding together each of the various credit sources utilized by the respondent and/or family, the total number was computed, ranging from 0 to 7 sources. The mean was computed by adding the total number of credit sources obtained for each respondent and dividing by the total number of respondents. The median was the central value where 50 percent of the

sample either had higher or lower values.

CREDIT AND BILL MANAGEMENT: Respondents were asked three questions about handling their credit and bills. They were to indicate how often they: paid interest on charge cards, worried about where the money would come from to pay bills, and made only minimum payments on charge cards. They were to circle one of five answers: never, seldom, occasionally, usually, or most of the time.

TYPES OF HOUSEHOLD DEBT: Respondents were asked to circle any of the types of household debt they held. The possibilities were: mortgage on own home(s), mortgage on rental property or other home(s) or real estate, automobile or other vehicle loan(s), credit cards, home improvement loan(s) educational loan(s), doctor, dentist, hospital, nursing home bills, loans(s) owned to friends, or family members, and other.

TOTAL NUMBER OF TYPES OF HOUSEHOLD DEBT: By adding together each of the various number of household debt held, the total number of household debt was computed, ranging from 0 to 9.

TOTAL HOUSEHOLD DEBT: The survey instrument specified the dollar amount of the debt in categories. Respondents were to circle a category that summarized their household debt: 1) 0; no debt 2) $1 - $499 3) $500 - $ 999 4) $1,000 - $1,999 5) $2,000 - $2,999 6) $3,000 - $ 3,999 7) $4,000 - $4,999 8) $5,000 - $7,499 9) $7,500 - $9,999 10) $10,000 - $19,999 11) $20,000 - $29,999 12) $30,000 - $49,999 13) $50,000 - $74,999 14) $75,000 - $99,999 and

15) $100,000 or more. The mean was calculated by adding together the codes for the total debt categories for all of the respondents and then dividing by the number of respondents. The median was the central category where half the sample was either above or below the category.

DEBT-TO-INCOME RATIO: This variable was operationalized as the household debt divided by the household income. Debt and income variables are given in categories. The ratio was computed by taking the midpoint of the each respondent's debt category and dividing it by the midpoint of the same respondent's income category. Midpoints were rounded up to the next whole number. For example, if a respondent had income in the $20,000 - $24,999 category, the midpoint was computed as $22,450. If the respondent had debt in the $3,000 - $3,999 category the midpoint was $3,500. Thus the debt-to-income ratio would be $\frac{\$3,500}{\$22,450}$ or .16. The mean value was computed by adding the ratios of all the respondents and dividing by the total number of respondents. The median value was the middle ratio where 50 percent of the sample either had higher or lower values.

TYPES OF HOUSEHOLD ASSETS: Respondents were asked to circle the various types of household assets that the household owned or was currently buying. The possibilities were: own home, second home and or vacation home, any vehicles, checking account, certificate(s) of deposit, stocks or mutual funds, IRA, Keogh or 403b funds, and other (jewelry, antiques, household possessions. etc).

TOTAL NUMBER OF TYPES OF HOUSEHOLD ASSETS: This was

computed by adding together each of the various number of household assets to find the total number of household assets, ranging from 0 to 9.

TOTAL VALUE OF HOUSEHOLD ASSETS: The survey instrument specified a possibility of 15 categories for the total dollar amount of assets for the household. Respondents were asked to circle one category from these: 1) 0 - $999 2) $1,000 - $1,999 3) $2,000 - $2,999 4) $3,000 - $3,999 5) $4,000 - $4,999 6) $5,000 - $7,499 7) $7,500 - $9,999 8) $10,000 - $14,999 9) $15,000 - $19,999 10) $20,000 - $29,999 11) $30,000 - $49,999 12) $50,000 - $74,999 13) $75,000 - $99,999 14) $100,000 - $199,999 and 15) $200,000 or more. The mean was calculated by adding the codes for the total household assets categories of all respondents and then dividing by the total number of respondents. The median was the middle category where half the sample had either higher or lower categories.

INDEPENDENT VARIABLES

AGE CATEGORY: The years of age were specified by respondents in the questionnaire. For the purposes of this survey only respondents over the age of 55 were selected. Respondents were grouped into 55 to 64 and 65 and above categories. These categories were chosen based on research indicating that 55 to 64 year olds were in the life stage where they were preparing for retirement. This was in contrast to the individuals who were 65 and older, where the majority of individuals had retired. These two groups were

assumed to have different financial goals and plans, becoming the basis of comparison for the financial transitions families make as they age.

GENDER: Respondents indicated that they were either male or female.

MARITAL STATUS: The survey instrument specified the following categories of marital status: first marriage, separated, widowed, divorced, remarried, or never married. The researcher recoded these into two categories, called "married" which included married and remarried individuals, and "not married" which included the never married, divorced, separated, and widowed individuals.

MARITAL-GENDER: The gender and marital status variables were combined to create a combination variable with three categories: 1) married, male or female 2) never married, divorced, separated, or widowed female and 3) never married, divorced, separated or widowed male.

EDUCATION: Respondents were asked to indicate the highest number of years of school they had completed. Examples were given as: high school = 12 years; one year of college or trade school = 13 years; BS = 16 years. This variable was then recoded into two categories, lower education and higher education. Lower education included individuals with zero through twelve years of education and higher education pertained to individuals with 13 or more years.

HOUSEHOLD SIZE: Respondents were asked three questions relating to the age of persons living in the household. The household size variable was created by counting the number of

individuals that the respondent had recorded as living in the household.

RETIREMENT STATUS: Respondents were asked to select from the following categories: employed and self employed, unemployed, at home full time, and retired. For the purposes of this study any person who was employed, self-employed or unemployed was considered not retired. Any respondent who was at home full time or who was retired, was considered retired.

DATA ANALYSIS

The 1988 Family Economic Well-Being Survey data was gathered and coded by other researchers. The data pertaining to respondents over 55 was first analyzed by this researcher. The statistical analysis was performed using the Statistical Package for the Social Sciences (SPSS/PC 3.0).

The research questions in this study were answered using descriptive statistics, including means, medians, ranges, and frequencies. Frequencies were used first to attain an initial picture of the sample relative to the two age categories and selected variables.

The sample included 143 cases. Since not all of the respondents answered every question, some variables had missing data. Thus some of the statistical test results included a sample size less than 143 cases.

CHI - SQUARE TEST OF INDEPENDENCE

To test for an association between the independent and dependent variables, the Chi-square test of independence

tested the null hypothesis. This statistical test was chosen because the majority of the data was categorical and this is an appropriate test to use with ordinal data. By cross tabulating any two variables, a contingency table was produced with frequencies for the aggregate of categories contained for each variable. The Chi-square test was used to measure if the discrepancy between the observed and expected frequencies occurred by chance. If the difference between the two variables occurred by chance, the two variables were independent and an association was not made between the two variables. The Chi-square increased as the differences between the observed and expected frequencies for each category increased.

The null hypothesis indicating that the two variables were independent was rejected when the probability rate associated with the Chi-square was less than .10.

To perform a valid Chi-square statistical test, all cells had to have an expected frequency of at least five. In an attempt to meet this requirement, some of the categories were collapsed to create a smaller number of categories with increased observations in each cell.

Chapter 4

RESULTS

Description of the Sample

One hundred and forty-three cases were included in this study because they met the criteria of having a financial manager who was 55 years old or older. The range in age was from 55 to 86 years old. The mean age for the sample group was 66 years old. The two age groups were chosen because the two groups were assumed to differ in their financial status. The preparations for retirement are usually in progress for the 55 to 64 year olds, while the 65 and older group are generally retired. When the sample group was split into the two age groups, 62 respondents (43 percent) were 55 to 64 years old and 81 financial managers (57 percent) were 65 to 86 years in age. There were 81 male (57 percent) financial managers and 62 (43 percent) were females. A more detailed description of age and gender is shown in Table 1.

The marital status of the respondents was as follows: 88 (62 percent) were in their first marriage, 25 (18 percent) were remarried, 27 (19 percent) were widowed, 1 respondent (1 percent) was divorced, and 2 (1 percent) were never married. Of the respondents who were married or remarried, the number of years married ranged from one to fifty-nine years. The

average number of years of marriage was 37 years. The distribution of the financial managers by marital status can be seen in Table 2.

Table 1. Number Distribution of the Subsample, Age 55 and Over, by Gender and Age.

Gender	Age					Total
	55 - 59	60 - 64	65 - 69	70 - 74	75+	
Male	20	18	15	16	12	81
Female	13	11	15	15	8	62
Total	33	29	30	31	20	143

Table 2. Distribution of Financial Managers by Marital Status.

Marital Status	Count	Percent
First Marriage	88	62
Remarried	25	18
Widowed	27	19
Divorced	1	1
Never Married	2	1
Total	143	101 %[a]

[a]Due to rounding, the total is greater than 100%.

The number of years of school completed was recorded by the respondents. Twenty-nine percent had completed 11 years of school. Thirty-seven percent had completed 12 years of school. Thirty-four percent of the financial managers had completed more than 12 years of school. The highest number of years of education recorded was 20 years. The average number of years of school was 12 years.

Ninety-nine (69 percent) of all of the respondents

reported that they were retired from employment at the time of the survey. Thirty-two financial managers (22 percent) were either employed or self employed. Eight respondents (6 percent) stated that they were home full time. Four respondents did not include their employment status and no one reported that they were unemployed. The distribution of age categories by employment status is shown in Table 3.

Table 3. Distribution of Age Category by Employment Status.

Variable	Count	Age Category	
Employment status		55 - 64	65+
		(percent)	
Employed/Self employed	32	46	5
At Home Full Time	8	10	3
Retired	99	44	92
Total	139	100%	100%

Note that the majority of older respondents were retired (92 percent). Nearly equal percentages of younger respondents were either employed or retired.

Information on the total amount of household of income, assets, and debts was recorded in categories. The mean 1987 total household income before taxes was $20,000 to $24,999 and the median income was $15,000 to $19,999 for all respondents 55 and over. The mean total value of household assets was $20,000 to $29,999, and the median value of assets was $30,000 to $49,999 for all respondents 55 and over. Thirty percent of the respondents had no household debt. The mean household debt was $3,000 to $3,999 and the median debt was $500 to $999 for all the respondents.

A summary table with selected financial variable information by age categories is presented in Table 4.

Table 4. Median of Selected Financial Variables for Financial Managers age 55 and over.

Variable	Age		
Total Amount of Household:	Overall	55 - 64	65 +
Income	$15,000-19,999	$20,000-24,999	$15,000-19,999
Debt	$500-999	$4,000-4,999	$0.00
Debt-to-Income Ratio	.044	.164	0.00
Assets	$30,000-49,999	$30,000-49,999	$20,000-29,999
Total Number of Types (Sources) of:			
Credit	2	2	2
Income	3	2	3

Since this study focused on an older sample, it was important to consider the possible financial strain of a chronic health condition. Older respondents could have the possibility of large debts incurred by chronic illness, an important factor to consider when discussing debts and the debt-to-income ratio. In response to this concern a question in the survey was included, asking if they or anyone living in their household had a chronic health condition that was a financial strain. Sixteen respondents (13 percent) replied affirmatively. This was considered to be a small percentage of the entire sample and too small to statistically test for

associations with other variables.

Income

The first group of research questions and hypotheses were established to describe the sources of total household income and to determine the variables that have an association with income.

Question 1: What percentage of respondents 55 to 64, and 65 and older, had each of the following sources of household income: wages or salary from a job, own business income, savings interest, investments, pensions, alimony and spousal maintenance, child support, scholarships for education, gifts from family, Social Security, Aid to Families with Dependent Children, General Assistance, Supplemental Security Income, Worker's Compensation, farm support programs, rental income or other?

The financial managers were asked to specify all their personal and family sources of income. A list was provided of 15 possible sources of income and the respondents were to circle the income sources they received. The percentage of financial managers in each of the two age groups who received each source of income is shown in Table 5.

Out of the 62 respondents in the 55 to 64 year old age category, the top four income categories received by the highest percentage were: savings interest and pensions (48 percent), wages or salary (40 percent), and Social Security (37 percent). The following five categories were not listed as an income source by any financial managers: alimony, child support, scholarships, welfare, and farm support.

The income sources of the 65 and older group were also recorded. For the 78 respondents in this category, the four

categories received by the highest percentage were: Social Security (94 percent), savings interest (73 percent), pensions (68 percent), and investments (37 percent). There were three income categories which no respondent reported receiving. These categories were alimony, scholarships, and worker's compensation.

Table 5. Percentage of Households of Financial Managers' 55 to 64, and 65 and Over Who Received Each Source of Income.

Variable	Age Category	
Source	55 - 64	65 +
Wages or Salary	40%	8%
Your own Business	18	4
Savings Interest	48	73
Investments	34	37
Pensions	48	68
Alimony, Spousal Maintenance	0	0
Child Support	0	1
Scholarships for Education	0	0
Gifts from Family	3	4
Social Security	37	94
AFDC, General Assistance, SSI	0	3
Worker's Compensation	2	0
Farm Support Programs	0	1
Rental Income	8	9
Other	0	3
Total Number	62	78

While more than nine out of ten of the 65 and older age group received Social Security, only one-third of the younger age group did. In contrast, a similar percent for each group recorded income from investments and rental income. For the category of savings interest, almost half of the younger group had this source of income while almost 75 percent of the older age group had savings interest. The final difference was

notably in the wages or salary category. Forty percent of the younger age group recorded receiving wages or salary while only eight percent of the older age group received wages or salary. These results suggested that the percentage of respondents receiving certain types of income was different for each age category. Not surprisingly, a higher percentage of respondents in the younger category were receiving income from wages and salary, because they are more likely than older groups to be working. As people grow older, they are less likely to be employed and are more likely to be receiving Social Security retirement benefits and pensions.

Question 2: What percentage of respondents age 55 and over, received each source of household income by retirement status?

The financial managers were asked what their employment status was at the current time of the questionnaire. The over 55 sample were either employed or self employed, at home full time, or retired. These categories were recoded into two retirement categories, not retired or retired. Employed or self employed individuals were labelled not retired, while retired respondents and individuals at home full time were labelled retired.

As shown in Table 6, the four income categories received by the highest percent of not retired respondents were: wages or salary (69 percent), savings interest (44 percent), your own business (38 percent), and investments (34 percent). There were seven income categories which no financial manager reported receiving.

The source of income received by the highest percent of

retired individuals was Social Security (82 percent). The other sources of income received by more than one-third were: pensions (74 percent), savings interest (68 percent), and investments (35 percent). There were only three categories not mentioned by any of the retired financial managers. These were alimony and spousal maintenance, scholarships for education, and worker's compensation.

Table 6. Percentage of Financial Managers' Households Who Received Each Source of Income By Retirement Status.

Variable	Retirement Status	
Source	Not Retired	Retired
Wages or Salary	69%	7%
Your Own Business	38	2
Savings Interest	44	68
Investments	34	35
Pensions	16	74
Alimony, Spousal Maintenance	0	0
Child Support	0	1
Scholarships for Education	0	0
Gifts from Family	0	5
Social Security	28	82
AFDC, General Assistance,SSI	0	2
Worker's Compensation	3	0
Farm Support Programs	0	1
Rental Income	22	4
Other	0	5
Total Number	32	105

These results suggested the importance of certain income sources depending on retirement status. Not retired individuals received income primarily from wages or salary, savings interest, their own business, and investments. For retired individuals, the major sources were social security,

pensions, and savings interest. A possible reason why seven percent of retired individuals recorded wages and salary was because the questionnaire did not define retirement. Some individuals may have considered themselves retired from their primary occupation but were still working at other paid employment activities. These results agree with the finding by Ruffin (1989), Freidman and Sjogren (1981), and Hefferan (1981) that retired individuals record major income sources as Social Security and pensions.

Question 3: What were the mean, median, and range of the total number of household income sources for respondents age 55 to 64, 65 and over, and for the entire respondent sample?

A new variable, total number of household income sources, was created by adding together the number of income sources received by the financial managers and their families.

The mean number of income sources for the 140 respondents over 55 were three sources. The median number of income sources were three sources and the range was from one to six sources of income.

The mean and median number of income sources for 55 to 64 year olds were two. The range of sources was from one to five sources. The 65 and older group recorded a slightly higher average number of income sources and they also had a broader range of income sources from one to six sources.

These results confirm previous findings by the New Beneficiary Study (Maxfield, 1985). Older respondents were more likely to be receiving Social Security and/or a pension benefit that younger respondents would not be receiving. The

receipt of Social Security retirement benefits and pensions could possibly be the reason why the older group recorded a higher total number of income sources when compared to the younger group.

Question 4: What were the mean, median, and range of the total amount of household incomes for respondents age 55 to 64, and 65 and older?

Respondents were asked to estimate their total household income from all sources in nominal 1987 dollars before taxes. The income totals were categorized in 15 categories of unequal range. For the 55 to 64 year old age category, the mean total household income bracket was $25,000 to $29,999. Fifteen percent of the 61 respondents in this category were in this category. The median total household income bracket was $20,000 to $24,999. The range of total income included less than $5,000 (three respondents) to $100,000 or more (two respondents).

The 65 and over respondents reported lower household incomes. The mean and median income category was $15,000 to $19,999. The range of total income was smaller than the younger age group. The range included less than $5,000 (two respondents) to $70,000 to $79,999 (one respondent).

Question 5: What were the mean, median, and range of the total amount of household incomes by respondents' retirement status?

Out of the 32 respondents who indicated that they were not retired, the mean total household income bracket was $30,000 to $34,999. This was slightly higher than the median bracket which was $25,000 to $29,999. The range of total income covered all 15 categories from less than $5,000 (two

respondents) to $100,000 or over (one respondent).

One hundred and seven respondents were classified as retired. The mean total income was $20,000 to $24,999 and the median income was $15,000 to $19,999. The range was just as broad as the not retired respondents. However, three financial managers reported having income under $5,000 and one person recorded income over $100,000.

The association between age and total household income was expected. Studies on retirement and income have all stated that the removal of a person from the labor force after retirement is the primary cause for a reduction in income (Ruffin, 1989; Friedman & Sjogren, 1981; Hefferan, 1981).

Hypothesis 1: Among respondents age 55 and over, there is no relationship between total amount of household income and two age categories (55 to 64, 65 and over).

To test the relationship between age and total household incomes, the Chi-square test of independence was utilized. In order to perform the test, each cell must have an expected frequency of at least five. To meet this requirement, the researcher recoded the income categories into the following five categories: 1) $0 - $9,999, 2) $10,000 - $14,999, 3) $15,000 - $24,999, 4) $25,999 - $34,999, and 5) $35,000 and over.

The relationship was statistically significant at the p=.03 level as shown in Table 7. The younger age group recorded the lowest percentage of respondents in the lowest income category respondents ($0 to $9,999). In contrast, the 65 and older age group recorded the lowest percentage in the

highest income category ($35,000 and over). The smallest percentage of respondents were recorded in opposite categories. The null hypothesis was rejected and it was concluded that among respondents 55 and older there is an association between age and total household income. Younger respondents were less likely to report low income levels than the older age group.

Table 7. Distribution of Age Category by Total Household Income Level.

Variable	Count	Age Category		Statistics
Income Level		55 - 64	65+	
		(percent)		
$0 - 9,999	23	10	23	$x^2 = 10.63$
$10,000 - 14,999	34	23	27	$p = .03$
$15,000 - 24,999	34	21	28	$df = 4$
$25,000 - 34,999	25	25	14	
$35,000 and over	19	21	8	
Total	135	100%	100%	

Hypothesis 2: Among respondents age 55 and over, there is no relationship between age categories (55 to 64, 65 and over) and total amount of household income holding marital status constant.

This hypothesis was formulated to test for a relationship between total income and age when marital status was controlled. For empirical testing, marital status was recoded into two categories. Individuals who were in their first marriage or remarried were in the category called married. In the second category, not married, were individuals who were either never married, widowed, separated, or divorced. A cross tabulation was performed and the Chi-square test of independence was used to test for an association. Income was

also recoded into three categories to allow for an expected frequency of at least five in each cell.

One hundred and nine out of a possible 143 respondents were categorized as married. The results are shown in Table 8. Among those who were married, 47 percent of the 55 to 64 group had incomes of $25,000 or greater compared to 46 percent of the older age group who were in the lowest income category. The Chi-square test was significant at the p=.037 level. The null hypothesis relating married couples to total income was rejected. Among married respondents, the younger age group was more likely to have higher total incomes than the older age group.

Table 8. Distribution of Age Category by Total Household Income Level Controlling for Married Respondents.

Variable	Count	Age Categories		Statistics
		Married		
Income Level		55 - 64	65+	
		(percent)		
$0 - 14,999	41	29	46	x^2 = 6.61
$15,000 - 24,999	29	24	30	p = .037
$25,000 or more	39	47	24	df = 2
Total	109	100%	100%	

The not married group only had 26 respondents. Thus a valid Chi-square test of independence of age by income for this group could not be performed. The expected frequencies of all of the cells did not have five cases.

Hypothesis 3: There is no relationship between age categories (55 to 64, 65 and over) and the total household income holding marital-gender constant for all respondents 55 and over.

The new variable, marital-gender, was created in order to test this hypothesis. This variable was created by combining the two marital statuses with gender. The three categories were: 1) male or females who were married, 2) not married males, and 3) not married females. However, after this variable was created a valid statistical test could not be performed because several cells had frequencies of less than five.

Hypothesis 4: Among respondents 55 and over, there is no association between age categories (55 to 64, 65 and over) and the total amount of income holding education constant.

Respondents indicated the highest number of years of school they had completed. The number of years of education was then recoded into two categories. The two categories were lower education, 0 to 12 years, and higher education, more than 12 years. A Chi-square test of the cross tabulation of income and age controlling for education is shown in Table 9.

The first cross tabulation controlling for lower education was statistically significant at p=.05. For both age groups, 42 percent or more had incomes in the lowest income bracket. In contrast, only 13 percent of the 65 and older respondents had high incomes compared to 35 percent of those in the younger age group. The null hypothesis could be rejected. It was concluded that among respondents 55 and over there was an association between total household income and age when controlling for lower education.

Table 9. Distribution of Age Category by Total Household Income Level Controlling for Two Education Levels.

Variables	Count	Age Categories		Statistics
		Lower Education		
Income Level		55 - 64	65+	
		(percent)		
$0 - 14,999	45	42	59	$x^2 = 5.95$
$15,000 - 24,999	23	23	28	p = .05
$25,000 or more	21	35	13	df = 2
Total	89	100%	100%	
		Higher Education[a]		
0 - 14,999	10	11	32	
$15,000 - 24,999	11	17	32	
$25,000 or more	22	72	36	
Total	43	100%	100%	

[a]Due to small cell size, a valid statistical test could not be performed.

For respondents who had higher educational levels a valid test could not be performed because the contingency cells did not have an expected frequency of at least 5 respondents in each cell. However, the second part of this table does show some similarities and differences in the percentages between age groups. First of all, for both younger and older age categories, the income category receiving the highest percentage of respondents was the top income category ($25,000 or more). Secondly, the percentage recording the highest income category was much larger for the youngest age group (72 percent).

Hypothesis 5: Among respondents 55 and over, there is no relationship between retirement status and the amount of household income.

This test was statistically significant at the p=.002 level as shown in Table 10. Not retired individuals were more likely to have a total household income of $25,000 or more (58 percent). This was in contrast to retired individuals who were more likely to receive incomes in the lowest income category (48 percent). The null hypothesis was rejected because an association was found between retirement status and total household income.

Table 10. Distribution of Retirement Status by Total Household Income Level and Total Number of Income Sources.

Variables	Count	Retirement Status		Statistics
Income Level		Not Retired	Retired	
		(percent)		
$0 - 14,999	55	23	48	x^2 = 12.27
$15,000 - 24,999	34	19	28	p = .002
$25,000 or more	43	58	25	df = 2
Total	132	100%	101%[a]	
Income Sources[o]				
1 or 2	58	53	39	
3 or 4	73	38	58	
5 or more	6	9	3	
Total	137	100%	100%	

[a]Due to rounding, the total is greater than 100%.
[o]Due to small cell size, a valid statistical test could not be performed.

These results agree with findings in the New Beneficiary Study and The Retirement History Survey. Retirement from a primary occupation withdraws salary and wages as a source of income. Respondents who were retired had lower total incomes than not retired respondents.

Hypothesis 6: There is no association between retirement status and the total number of household income sources utilized by respondents, age 55 and older.

The cross tabulation of the two variables is shown in Table 10. The Chi-square test of independence was used to measure the relationship between the number of income sources and retirement status.

The Chi-square test was not valid because two categories had an expected frequency of less than five respondents due to the small number of not retired respondents. For financial managers who were not retired, the highest percentage of respondents was with one or two income sources (53 percent). For respondents who were retired the highest percentage was recorded in the category of three or four income sources (58 percent). The results may have indicated that retired individuals have a greater number of income sources. These results were not surprising since retired individuals are more likely to receive income from Social Security and/or pension that employed individuals would not receive (Tongren, 1988; Hogarth, 1987; Moon, 1986; Maxfield, 1985; Hammermesh, 1984; Friedman & Sjogren, 1981).

Consumer Credit

This group of questions and hypotheses were developed to explore the utilization of credit by older rural families by age group and retirement status. Questions regarding the relationship between the total number of credit sources, age categories, and retirement status were tested.

Question 1: What percentage of respondents' families age 55 to 64, and 65 and older use credit? What percentage use credit cards, bank credit, credit unions, finance companies, pawn brokers, or receive credit from friends or family?

The financial managers were asked one question about consumer credit in the questionnaire. The respondents could circle a variety of credit sources they utilized or indicate that they did not use credit.

Out of the 55 to 64 year olds, 81 percent (50 respondents) stated that they used credit. In the 65 and older group, the percent using credit was smaller, 58 percent (79 respondents).

Table 11. Percentage of Financial Managers' Households Utilizing Specific Credit Sources by Age Categories.

Variable	Age Category	
Source	55 - 64	65+
Credit Card	68%	46%
Bank Credit	31	34
Credit Union Credit	39	17
Finance Company	3	3
Pawn Broker	0	0
Credit from Friends	3	0
Credit from Family	0	1
Total Number	62	79

The percentage of respondents in the two age categories who used the various sources of credit is shown in Table 11. The source of credit utilized by the highest percent of the 55 to 64 year olds, was credit cards (68 percent). Credit union credit was used by 39 percent and bank credit used by 31 percent of the younger respondents. There were two credit

sources categories not used by the 55 to 64 group: pawn broker, and credit from family. For the 65 and older group, the choice most frequently specified was credit cards (46 percent), followed by bank credit (34 percent), and credit union credit (17 percent).

Question 2: What were the mean, median, and range of the total number of credit sources used by respondents age 55 to 64, and 65 and older?

The total number of credit sources variable was created by adding together the number of credit sources utilized by each respondent and their family. For the 50 respondents in the 55 to 64 year old group, the mean number of credit sources was 1.78 and the median was 2 sources of credit. The range of credit sources was from one source (20 respondents) to four sources (2 respondents). For the 65 and older group, the mean number of credit sources was 1.64 and the median was 2. The range of credit sources was from one source (22 respondents) to four sources (1 respondent) of consumer credit.

The findings do not suggest any major difference between the total number of credit sources for each age group. However, this will not be known until research hypothesis one is tested.

Question 3: What percentage of respondents 55 and older, made only minimum payments on charge cards, worried about money to pay bills, and paid interest on charge accounts?

The respondents were asked three questions which related to their credit and bill payment behavior. The questions were the frequency of: making minimum payments on charge accounts, paying interest on charge accounts, and whether they worried about where the money would come from to pay bills. The possible answers to the questions were: never, seldom, occasionally, usually, and most of the time. The respondents were not divided into the two age groups because frequencies for each answer were too small for an age comparison. An overall discussion of all the respondents over 55 was then included.

On average, for the entire 55 and older group, financial managers stated they seldom paid interest on credit cards. There were respondents in each of the answer categories but only 12 percent reported paying interest on charge accounts most of the time.

When asked to respond to how often they worried about where the money came from to pay bills the average response was seldom (32 percent). The range of response was from never (29 percent) to most of the time with 6 percent.

Finally, respondents were asked how often they paid only the minimum on charge cards. The average response was seldom with 18 percent but the median response was never with 70 percent. The range of responses was from never (70 percent) to most of the time (3 percent).

These descriptive results suggested that respondents 55 and older in this sample appear to have few problems paying bills and seldom pay the minimum or interest on charge cards. Secondly, only a minority of respondents consistently worried about money to pay bills or paid extra charges on charge cards most of the time.

Hypothesis 1: Among respondents 55 and over, there is no association between age categories (55 to 64, 65 and over) and the total number of credit sources utilized.

The hypothesis was developed to see if there was an association between age and the number of credit sources a financial manager utilized. The total number of credit sources variable was recoded into three categories: 1) Do not use credit, 2) 1 or 2, and 3) 3 or 4. The cross tabulation of the two variables and the Chi-square test is shown in Table 12.

Table 12. Distribution of Age Categories by Total Number of Credit Sources.

Variable	Count	Age Category		Statistics
Credit Sources		55 - 64	65+	
		(percent)		
Do not use credit	44	19	41	$x^2 = 7.27$
1 or 2	84	69	52	$p = .03$
3 or 4	13	11	8	$df = 2$
Total	141	99%[a]	101%[a]	

[a]Due to rounding, totals do not equal 100%.

The highest percentage recorded for the 55 to 64 year olds were one or two sources (69 percent) and this category also had the highest percentage for the older group (52

percent). Thus over 50 percent of both groups used one or two types of credit. However, the 65 and older group had a much larger percentage of respondents who did not use credit (41 percent). The hypothesis was statistically significant at the p=.03 level and the null hypothesis was rejected. An association was found between age categories and the total number of credit sources utilized. The older respondents were more likely to not use credit in comparison to the 55 to 64 year old group.

These results agreed with previous research by Danes and Hira (1986), Jensen and Reynolds (1986), and Tongren (1974). They found that as the head of the household got older the use of credit decreased.

Hypothesis 2: There is no association between age categories (55 to 64, 65 and over) and the total number of credit sources utilized holding constant total income.

Even after the total income categories were recoded into three categories and the total number of credit sources were recoded, a valid test could not be performed. The expected cell frequencies were less than five for every part of the test. The total household income was included as an important control variable, because the researcher wanted to see if total income had an effect on the total number of credit sources.

Hypothesis 3: There is no association between total number of credit sources utilized and retirement status for all respondents 55 and over.

The Chi-square statistical test was not valid due to one cell having an expected frequency of less than five. However,

Table 13 outlines the highest percentage of responses for each age group was one or two credit sources. More than twice as many retired individuals did not use credit as the not retired group.

Table 13. Distribution of Retirement Status by Total Number of Credit Sources.

Variable	Count	Retirement Status	
Credit Sources[c]		Not Retired	Retired
		(percent)	
Do not use credit	42	16	35
1 or 2	82	66	58
3 or 4	13	19	7
Total	137	101%[a]	100%[a]

[a]Due to rounding, the total is greater than 100%.
[c]Due to small cell size, a valid statistical test could not be performed.

Hypothesis 4: Among respondents 55 and over, there is no association between age categories (55 to 64, 65 and over) and the total number of sources of credit holding education constant.

This hypothesis was developed to explore whether education was a factor in the total number of credit sources utilized by the two age groups. A valid the Chi-square test of independence could not be performed due to small cell sizes.

Debt

The questions and hypotheses discussing debt were developed to describe the types of debt and the total amount of debt for the over 55 year old sample. The researcher does recognize that the majority of the "types" of debt were

actually "uses" of debt.

Question 1: What percentage of respondents age 55 to 64, and 65 and older, had each of the following types of household debt: mortgage on own home, mortgage on rental property or other home or real estate, automobile or other vehicles loans, loans owed to friends or family members and other?

Each respondent was asked to circle the categories in which they had debts. There was a possibility of nine types of household debt. Each response was counted and a table of the percentage of financial managers in each of the two age groups who had debt of the various types is shown in Table 14.

Table 14. Percentage of Household Debt of Financial Managers' 55 to 64, and 65 and over by Types.

Variable	Age Category		Total
Debt Types	55 - 64	65+	
Mortgage on own home	34%	9%	N = 111
Mortgage on Rental property or Real Estate	2	4	N = 111
Vehicle Debt	45	22	N = 110
Credit Card	29	19	N = 110
Home Improvement Loan(s)	7	11	N = 110
Educational Loan	0	0	N = 110
Medical Debt	13	17	N = 110
Owe to Friends and Family	4	0	N = 110
Other	2	2	N = 110

The three debt categories utilized by the highest percentage of 55 to 64 year old respondents were: vehicle debt (45 percent), mortgage on own home (34 percent), and credit card debt (29 percent). For the remaining six categories thirteen percent or less of the respondents reported debts from those sources.

The top three debt categories used by the highest percentage of respondents over 65 were: vehicle debt (22 percent), credit card debt (19 percent), and medical debt (17 percent). Less than 11 percent of the older age group reported household debt in the other six categories.

When the groups were compared, several similarities and differences were apparent. Vehicle debt received the highest percentage of respondents for both age categories. Almost 50 percent of those 55 to 64 had vehicle debt while approximately 20 percent of the older age group had vehicle debt. A second major difference was shown in the mortgage on own home category. About one-third of the younger respondents had debt due to a mortgage compared to about 10 percent of the 65 and older group. Additionally, 29 percent of the younger age group recorded having credit card debt while only nineteen percent of the older group had credit card debt.

Question 2: What were the mean, median, and range of the total amount of household debt for respondents, age 55 to 64, 65 and older, and for the entire group of respondents?

Respondents were asked to indicate the total amount of household debt from nine possible debt categories. There was a possibility of 15 categories ranging from $0 debt to $100,000 or more in debt.

For the entire sample of people over 55, the mean amount of total household debt was $4,000 to $4,999 of debt. The median amount was $500 to $999 worth of debt. The range included no debt (40 percent) to $75,000 to $99,999 (1 percent) of total household debt.

The 55 to 64 age group recorded an mean debt of $5,000 to $7,499. The median amount of debt was $4,000 to $4,999. The range of total debt included zero (28 percent) up to $75,000 to $99,999 (2 percent) of total household debt.

For the respondents in the older age category the mean total household debt was $2,000 to $2,999. The median amount of debt was zero. The range of debt was from no debt (52 percent) to $30,000 to $49,999 (2 percent).

Question 3. What were the mean, median, and range of the total amount of household debt by respondents retirement status?

The respondents who were coded as not retired had a mean total household debt of $7,500 to $9,999. The median household debt was lower at $5,000 to $7,499. The range of debt included no debt (28 percent) to $75,000 to $99,999 (3 percent).

Retired individuals had a mean total household debt of $2,000 to $2,999. The median household debt was lower at $1 to $499. The range of debt was smaller than recorded for the not retired group. The range included no debts (46 percent) to the $30,000 to $49,999 (1 percent) category.

The descriptive statistics suggest that not retired respondents were more likely to have higher amounts of debt when compared to retired individuals. However, this idea can not be confirmed until hypothesis five is tested.

Hypothesis 1: Among respondents age 55 and over, there is no association between age categories (55 to 64, and 65 and over) and the total amount of household debt.

The total household debt was recoded into three categories in an attempt to develop expected cell frequencies of a least five. The new debt categories were: 1) no debt, 2) $1 to $7,499, and 3) $7,500 and over. The Chi-square test and the results are shown Table 15.

The Chi-square test was significant at the p=.0025 level and the null hypothesis was rejected. Forty-two percent of the 55 to 64 year olds had debt of $7,500 or more. Only 13 percent of the 65 and older group had a total debt of $7,500 or more. The majority of the 65 and older group had no debt (53 percent). The two groups had the majority of their respondents in opposite categories of total debt. The working hypothesis was accepted and an association was found between age and the total amount of debt of financial managers and families.

Hypothesis 2. Among respondents age 55 and over, there is no association between age categories (55 to 64, 65 and over) and the total number of types of household debt.

To test this hypothesis a new variable, total number of debt types, was computed by adding together the code for the types of household debt the respondents had checked. The total number of debt types was then recoded into four categories: zero, one, two, and three to five to allow for statistical testing. Results of the Chi-square test of independence on age by total number of debt types is shown in Table 15.

Table 15. Distribution of Age Categories by Total Debt Level and the Total Number of Types of Household Debt.

Variable	Count	Age Category		Statistics
		55 - 64	65+	
		(percent)		
Debt Level				
no debt	43	29	53	$x^2 = 11.95$
$1 - 7,499	33	29	34	$p = .0025$
$7,500 or more	29	42	13	$df = 2$
Total	105	100%	100%	
Debt Types[a]				
0	42	26	52	$x^2 = 12.28$
1	31	37	20	$p = .0065$
2	21	17	22	$df = 3$
3 to 5	14	20	6	
Total	108	100%	100%	

Since the test was significant at the p=.0065 level, the null hypothesis was rejected; there was an association between age and the total number of debt types. The category with the highest percentage of younger respondents was one type of debt (37 percent). The second highest category for the younger age group was zero types of debt with 26 percent. For the older respondents, 52 percent recorded zero types of debt. The percent of individuals with one or two types of debt was almost equal. Twenty percent had one type, while twenty-two percent had two types. Only six percent of the older age category had three to five types of debt. Compared to the younger group, the 65 year old and older group were twice as likely to record zero types of debt.

These results agree with Tongren's (1974) research.

Older individuals had a smaller number of debt types when compared to younger age groups.

Hypothesis 3: Among respondents age 55 and over, there is no association between age categories (55 to 64, 65 and over) and the total amount household debt holding marital-gender constant.

The Chi-square test of independence was performed on age by debt, controlling for marital-gender. A valid statistical test could not be performed because a majority of the cells had expected frequencies of less than five.

Hypothesis 4: Among respondents over 55 years old, there is no association between the total amount of household debt and age categories (55 to 64, 65 and over) holding household size constant.

This hypothesis could not be tested because very few families had household sizes larger than two. However, a larger sample size may have allowed the researcher to test this hypothesis. The null hypothesis could not be rejected.

Hypothesis 5: Among respondents 55 and over, there is no association between retirement status and the total amount of household debt.

Results of the Chi-square test of independence of retirement status by total household debt is shown in Table 16.

According to the table, retired persons were more likely to have no debts (46 percent) compared to 29 percent of not retired individuals. Forty-three percent of the not retired respondents had debt of $7,500 or more compared to 22 percent of the retired. The results indicate that the highest percentage recorded in each age category were in opposite total debt categories. The Chi-square test of independence was 4.65 and the relationship was statistically significant at the

p=.097 level. The null hypothesis was rejected and it was accepted that there was a relationship between retirement status and the total amount of household debt. Respondents who were retired were more likely to have a lower total household debt than those not retired.

These statistical findings are supported by previous research by Christelow (1988), Sherman (1985), and Freidman and Sjogren (1981). These results suggest that not retired respondents may have higher total debts when compared to retired respondents.

Table 16. Distribution of Retirement Status by Total Household Debt Level and Total Number of Types of Debt.

Variables	Count	Retirement Status		Statistics
Debt Level		Not Retired	Retired	
		(percent)		
No Debt	43	29	46	x^2 = 4.65
$1 - 7,499	32	29	32	p = .097
$7,500 and over	29	43	22	df = 2
Total	104	101%[a]	100%	
Debt Types[b]				
0	42	25	44	
1	30	25	29	
2	21	21	19	
3 to 5	14	29	8	
Total	107	100%	100%	

[a]Due to rounding, the total is greater than 100%.
[b]Due to small cell size, a valid statistical test could not be performed.

Hypothesis 6: Among respondents over 55 years old, there is no association between total number of types of debt by retirement status.

A contingency table showing retirement status by total number of debt types is shown in Table 16. The Chi-square test of independence was used to measure for any association.

A valid Chi-square test of independence was not possible even after an attempt was made to collapse the total number of debt types categories from ten to four categories. There were cells with an expected frequency of less than five respondents for the not retired group. An effort was still made to understand the table. For financial managers who were not retired, there was almost an equal percentage of individuals in each total debt type category. In contrast, forty-four percent of the retired group had zero types of debt compared to only eight percent with more than three types. Notice that the percentage of older respondents recording higher level of debt types decreased as the number of debt sources increased.

Debt-to-Income Ratio

The debt-to-income ratio questions and hypotheses were developed to gain a better understanding of the relationship between debt and income levels of a rural older sample. A ratio was proposed as a measure illustrating how much of a families income was committed to debt obligation.

Question 1: What were the mean, median, and range of debt-to-income ratios for respondents age 55 to 64, 65 and older, and for all the respondents over 55?

The debt-to-income ratio was computed by dividing total household debt by total household income. The total debt and total income were given as categorical information. The ratio was compiled by determining the mid-point of a respondent's debt category and dividing this number by the mid-point of the same respondent's income category. Mid-points were rounded up to the next whole number.

The mean debt-to-income ratio for the entire sample over 55 years old was .33. The median ratio was .044. Thus 50 percent of the sample had four percent or less of their income committed to debts. The reason for the large disparity between the mean and median is due to the large ratios calculated for a few respondents which highly skewed the calculation of the mean. The range of the ratio was from 0.00 (40 percent) to 3.20 (2 percent). In other words, two percent of the sample had debt levels that were more than three times their incomes.

For respondents 55 to 64, the mean debt-to-income ratio was .44. The median debt-to-income ratio was .164. The range of the ratio for the younger group was from 0.00 (28 percent) to 3.2 (4 percent).

The 65 and older group recorded a lower mean debt-to-income ratio of .22. The median debt to income ratio was 0.00. The range was smaller than recorded for the younger group from 0.00 (53 percent) to 1.20 (2 percent).

Thus on average, younger respondents had larger

proportions of income obligated to debt payments than older respondents. Secondly, the range of debt-to-income ratios was much larger for younger respondents, suggesting younger respondents were more likely to have a greater percentage of income used to pay debt obligations.

Question 2: What were the mean, median, and range of debt-to-income ratios by retirement status?

The mean debt-to-income ratio for not retired respondents was .472. The median debt-to-income ratio was .20. The range of the debt-to-income ratio was from 0.00 (26 percent) to 3.2 (4 percent). For the group of respondents who were retired, the mean debt-to-income ratio was .265. The median ratio was .02. The range of the ratio was from 0.00 (46 percent) to 3.20 (1 percent).

This descriptive information suggests that not retired respondents were more likely to have a larger ratio indicating that the incomes of not retired individuals were more committed to debt obligations than retired respondents.

Hypothesis 1: Among respondents 55 years old and over, there is no association between age categories (55 to 64, 65 and over) and respondent's debt-to-income ratio.

In order to accommodate an expected frequency of at least five in each cell, the ratios were collapsed into four categories: 0; .01 to .19; .20 to .49; and .50 to 3.20. These four categories were then cross tabulated by the two age categories and the Chi-square test of independence was performed.

The results shown in Table 17 were statistically significant at the p=.049 level. The younger age group

recorded between 24 and 28 percent of respondents in each ratio category. These results suggest an almost equal likelihood of having a debt-to-income ratio between 0.00 and 3.20 for the younger age group. Over 50 percent of the older age group had a ratio of 0.00 compared to 19 percent with a ratio between .50 to 3.20.

Table 17. Distribution of Age Categories by Debt-to-Income Ratio.

Variable	Count	Age Categories		Statistics
Ratio		55 - 64	65+	
		(percent)		
.00	42	28	53	$x^2 = 7.82$
.01 - .19	21	24	17	p = .049
.20 - .49	19	26	11	df = 3
.50 - 3.20	22	24	19	
Total	N = 109	102%[a]	100%	

[a]Due to rounding, the total is greater than 100%.

The null hypothesis was rejected and an association was found between age and debt-to-income ratios. Respondents in the older age category were more likely to report a lower debt-to-income ratio than younger respondents.

Hypothesis 2: Among respondents 55 and over, there is no association between retirement status and debt-to-income ratios.

The retirement status of the financial manager was tested for an association with the debt-to-income ratio. Results of the cross tabulation are shown in Table 18.

Even after recoding the ratio into four categories the statistical test was not valid due to cells with an expected frequency of less than five. However, it can be seen that

for financial managers who had retired, 46 percent had a debt-to-income ratio of zero. This suggests that retired respondents were more likely than not retired to have a zero debt-to-income ratio, but this could not be confirmed statistically. The null hypothesis was not rejected.

Table 18. Distribution of Retirement Status by Debt-to-Income Ratio.

Variable	Count	Retirement Status	
Ratio[c]		Not Retired	Retired
		(percent)	
.00	42	26	46
.01 - .19	21	22	20
.20 - .49	19	30	15
.50 - 3.20	21	22	20
Total	N = 103	100%	101%[a]

[a]Due to rounding, the total is greater than 100%.
[c]Due to small cell size, a valid statistical test could not be performed.

Hypothesis 3: Among respondents over 55, there is no relationship between age categories (55 to 64, 65 and over) and debt-to-income ratios holding household size constant.

This hypothesis could not be tested due to very few families having a household size greater than two. The researcher recognized that a larger sample size would have allowed this hypothesis to be tested. The null hypothesis could not be rejected.

Hypothesis 4: Among respondents 55 and over, there is no relationship between age categories (55 to 64, 65 and over) and debt-to-income ratios holding education constant.

After collapsing the ratio, age categories, and years of education, a statistical test was not able to be performed due

to small cell numbers. The null hypothesis was not rejected.

Hypothesis 5: There is no relationship between age categories (55 to 64, 65 and over) and the debt-to-income ratio holding marital-gender constant.

Unfortunately, this hypothesis could not be tested even after the categories were collapsed because the expected cell frequencies were less than five. The null hypothesis could not be rejected.

Assets

The questions and hypotheses in this section were developed to investigate the asset holdings of the older population. Also a description of the total number of asset types held was calculated along with testing for associations between variables.

Question 1: What percentage of respondents 55 to 64, and 65 and older, held the following household assets: own home, second home or vacation home, any vehicles, checking account, savings account, certificates of deposit, stocks or mutual funds, IRA, Keogh, 403b funds or other?

The financial managers were asked to specify all the household assets they owned or were currently buying (along with a spouse, if married), from a list of nine possible types. The percent of financial managers in the two age groups whose households held each type of asset is shown in Table 19.

The four types of assets held by the highest percent of respondents 55 to 64 were: own home (95 percent), checking account (92 percent), vehicles (85 percent), and savings account (82 percent). The six remaining categories were held

by 43 percent or less of the respondents. Second homes or vacations homes were held by the smallest percentage (18 percent).

All of the respondents in the 65 and over group owned a home (100 percent). The other types of assets held by more than 75 percent of the respondents were: checking account (91 percent), savings account (79 percent), and vehicles (78 percent).

Table 19. Percentage of Financial Managers' Households, 55 to 64, and 65 and over, Holding specified Assets.

Variable	Age Category	
Type of Asset	55 - 64	65+
Own Home	95%	100%
Second Home or Vacation Home	18	20
Vehicles	85	78
Checking Account	92	91
Savings Account	82	79
Certificates of Deposit	35	55
Stocks or Mutual Funds	32	36
IRA, Keogh, 403b	43	16
Other	38	49
Total Number	60	77

More than 75 percent of respondents in either age group recorded assets in the categories of own home, checking account, savings account, and vehicles. Only 35 percent of 55 to 64 year old financial managers held certificates of deposit, while 55 percent of the older age group held certificates of deposit. The two age groups also differed in one other category. Forty-three percent of the younger age group held IRA, Keogh and/or 403b funds. In contrast, only

16 percent of respondents 65 and older held assets.

These results hint at some differences between age groups and the types of assets held. Younger respondents are more likely to have some form of retirement account than the older age group. Also older respondents are more likely to have certificates of deposit.

Question 2: What were the mean, median, and range of the total value of household assets for respondents 55 to 64, and 65 and older?

Respondents were asked to estimate the total value of household assets. The household assets were to include the nine categories in Table 19. The respondents were then asked to pick one out of a possible 15 categories which best estimated the value of their household assets. The range was from the first category, less than $5,000, to the fifteenth category, $100,000 or greater.

For the younger group, both mean and median total value of household assets was $30,000 to $49,999. Asset categories ranged from $1,000 to $1,999 (2 percent) to $200,000 or more (9 percent) of household assets. For respondents over 65, the mean value of total household assets was $15,000 to $19,999. The median value was $20,000 to $29,999. The range of asset categories was from $1,000 to $1,999 (3 percent) to $200,000 or more (2 percent). No respondent in either age group had no family assets.

Question 3: What were the mean, median, and range of the total value of household assets by retirement status?

The mean of the total value of household assets for not retired individuals was in the $30,000 to $49,999 category.

The median value category was $50,000 to $74,999. Asset categories ranged from $1,000 to $1,999 (3 percent) to $200,000 or more (10 percent).

For respondents who were retired, the mean category for the total value of household assets was $20,000 to $29,999. The median category was also $20,000 to $29,999. The range of the total value of household assets was from $1,000 to $1,999 (2 percent) to $200,000 or more (3 percent).

Question 4: What were the mean, median, and range of the total number of asset types held by retirement status?

A new variable was computed, the total number of asset types, by adding the number of asset types respondents held.

For individuals who were not retired, the mean total number of asset categories held was five. The median was also five. The range of household assets holdings went from two asset types (2 respondents) to all nine types (1 respondent).

Respondents who were retired had a mean total number of five asset types. The median for retired individuals was also five. The range was broader than for not retired individuals by including respondents with one asset held. Total number of assets held ranged from one asset type (2 respondents) to nine assets types held (1 respondent).

Hypothesis 1: Among respondents 55 and over, there is no association between age categories (55 to 64, 65 and over) and the total value of household assets.

The 15 categories of the value of household assets were recoded into five categories: 1) $0 to $9,999, 2) $10,000 to $29,999, 3) $30,000 to $49,999, 4) $50,000 to $99,999, and

5) $100,000 or more. The results of the Chi-square test of independence are shown in Table 20. The test results indicated (p=.16) that there was no association between age and total value of household assets.

The percent of younger respondents in the three middle categories were almost equal (23 to 25 percent). For older respondents, the percent in the top four asset categories was almost equal (12 to 19 percent). The null hypothesis was not rejected and the working hypothesis was not accepted.

Table 20. Distribution of Age Categories by Total Value of Household Assets and Total Number of Asset Types Held.

Variables	Count	Age Category		Statistics
Asset Level		55 - 64	65+	
		(percent)		
$0 - 9,999	31	14	34	x^2 = 6.60
$10,000 - 29,999	27	25	19	p = .16
$30,000 - 49,999	26	23	19	df = 4
$50,000 - 99,999	24	23	16	
$100,000 or more	17	16	12	
Total	125	101%[a]	100%	
Asset Types[b]				
1 or 2	8	7	5	
3 to 5	70	48	53	
6 to 9	59	45	42	
Total	137	100%	100%	

[a]Due to rounding, the total is greater than 100%.
[b]Due to small cell size, a valid statistical could not be performed.

Hypothesis 2: Among respondents age 55 and over, there is no relationship between age categories (55 to 64, 65 and over) and the total number of types of household assets.

The total number of asset types variable was recoded into three categories to test the relationship between age and number of asset types. The new categories were: 1) 1 or 2, 2) 3 to 5, and 3) 6 to 9. The cross tabulation of the two variables is shown in Table 20.

A valid statistical test could not be performed because two out of six cells had an expected frequency of less than five. The null hypothesis was not rejected. However, results indicated that for either age category approximately 50 percent or more of respondents had three or more different types of assets. Only a small percentage of individuals in either age group had one or two types of assets.

Hypothesis 3: Among respondents 55 an over, there is no relationship between age categories (55 to 64, 65 and over) and the total value of household assets holding marital-gender constant.

This hypothesis was designed to test the relationship between and age categories and the total value of household assets when marital-gender was controlled. A valid Chi-square test could not be performed due to small cell size.

Hypothesis 4: Among respondents age 55 and over, there is no association between the total value of household assets by retirement status.

The total value of household assets were recoded into three categories as follows: 1) $0 to $19,999, 2) $20,000 to $49,999, and 3) $50,000 or more. The cross tabulation of the two variables is shown in Table 21.

Table 21. Distribution of Retirement Status by Total Value of Household Assets and Total Number of Asset Types Held.

Variables	Count	Retirement Status		Statistics
Asset Level		Not Retired	Retired	
		(percent)		
$0 - 19,999	43	24	39	$x^2 = 6.72$
$20,000 - 49,999	39	24	34	$p = .045$
$50,000 or more	40	52	27	$df = 2$
Total	122	100%	100%	
Asset Types[c]				
1 or 2	8	9	5	
3 to 5	69	47	54	
6 to 9	56	44	42	
Total	133	100%	101%[a]	

[a]Due to rounding, the total is greater than 100%.
[c]Due to small cell size, a valid statistical test could not be performed.

The category which held the highest percentage of financial managers who were not retired was $50,000 or more (52 percent). In contrast, the highest percentage of retired financial managers had assets in the lowest asset category ($0 to $14,999). The test was statistically significant at the p=.045 level. The null hypothesis was rejected and an association was found between retirement status and total value of household assets. Retired individuals are likely to record a lower total value of household assets than not retired financial managers.

These results agree with previous work by Hogarth (1988) and with the Life Cycle Hypothesis of Savings (Ando and Modigliani, 1963). Past research suggests that retired

individuals are involved in dissaving of their assets which decreases the value of total assets.

Hypothesis 5: Among respondents 55 and over, there is no relationship between the total number of types of household assets held by retirement status.

Results of the Chi-square test of independence of retirement status by total number of types of household assets are shown in Table 21.

The recoded total asset types variable had three categories. Nevertheless, a valid test could not be performed because two out of the six cells had expected frequencies of less than five. It appears, however, that regardless of retirement status most families with financial managers over 55 years old had three or more types of assets.

Chapter 5

CONCLUSION

In this study, the researcher attempted to describe the financial status of rural families with a financial manager over 55 years old. This research was undertaken to create a better understanding of the growing number of aging persons in the United States population. Recent media attention has focused on the health status of aging persons but little research has focused on the financial transitions people experience as they grow older and progress into retirement. When the sample was divided into the two age groups, 55 to 64, and 65 and over, a major assumption was made. It was assumed that by studying the two groups at one point in time, inferences could be made about the behavior of one group as it retires or ages.

A review of literature looking at income, consumption, credit, debt, ratios, and assets revealed that most of the research was derived from two studies performed between 1969 and 1981. Little research had compared the 55 to 64 year olds to the 65 year old group. These two groups formed the basis of comparison for this descriptive research.

Summary

Research in this study was based on 143 financial managers between the ages of 55 and 86 years of age. All of these financial managers had participated in the Michigan portion of The 1988 Family Economic Well-Being Survey by completing a written questionnaire. The questionnaire included a range of questions about; financial information (income, debt, assets, credit), employment, satisfaction about relationships, perceptions about the community, and demographic information.

The variables that were tested were derived from direct questions in the questionnaire and newly created variables developed for the statistical analysis. The dependent variables were: sources of household income, total number of income sources, total household income, sources of credit, total number of credit sources utilized, credit and bill management behavior, types of household debt, total number of types of household debt, total household debt, debt-to-income ratios, types of household assets held, total number of types of household assets, and total value of household assets. The independent variables used in this research were: age category, gender, marital status, marital- gender, education, household size, and retirement status.

Income

The four income sources received by the highest percentage of 55 to 64 year olds were: savings interest, pensions, wages or salary, and social security. This was

slightly different than the 65 an older group who reported social security, savings interest, pensions, and investments as their top sources.

The four income sources received by the highest percentage of financial managers who were retired or not retired was also measured. For respondents who were not retired, the top four income sources were: wages or salary, savings interest, own business income, and investments. For retired individuals, the top four sources were identical to the over 65 year old group: social security, pensions, savings interest, and investments.

The 1987 mean total household income category before taxes for financial managers 55 to 64 was $25,000 to $29,999 with a range of under $5,000 to over $100,000. Sixty-nine percent of the 55 to 64 year olds had $25,000 to $29,999 or less. For the 65 and over sample, the mean and median total household income category was $15,000 to $19,999, with a range of under $5,000 to $70,000 to $79,999. Sixty percent of the older financial managers had incomes of $19,999 or less. The results suggested that financial managers 65 and over were more likely to have lower total household incomes and a smaller range of incomes than the younger group studied.

The mean total 1987 household income category was also analyzed according to the retirement status of the financial manager. Not retired respondents had a mean total household income of $30,000 to $34,999, a median of $25,000 to $29,999, and a range from under $5,000 to over $100,000. In contrast, retired individuals, had a lower mean total household income

of $20,000 to $24,999, the median was $15,000 to $19,999, and the range was under $5,000 to over $100,000. It was concluded that household incomes decreased as respondents retired.

Fifty-three percent of the 55 to 64 year old group received income from one or two sources. The mean total was two sources of income. This was in contrast to the 65 and older group. The mean number of income sources was three, and 64 percent had one, two, or three income sources. The difference between the mean total number of income sources was attributed to the greater proportion of older clients who received social security benefits when compared to the 55 to 64 year olds.

Age categories were statistically related to total household incomes. Twenty-one percent of younger respondents had incomes over $35,000 in contrast to 23 percent of older respondents with incomes less than $9,999.

When marital status was introduced as a control variable, the relationship between age categories and total income was tested. Younger married respondents were more likely to have higher total incomes than older married respondents. This relationship was statistically significant. The relationship between age categories and total income controlling for not married respondents could not be tested due to a small sample size.

The association between age categories and total household income, controlling for educational level was also tested. For 55 to 64 year old respondents with lower educational levels (0 to 12 years), 42 percent had incomes of

$14,999 or less. Fifty-nine percent of the 65 and older group had incomes less than $14,999. At the higher educational level (13 to 20 years) the statistical test could not be performed due to small cell numbers in the Chi-square test.

Not retired respondents were significantly more likely to have incomes of $25,000 or more than retired respondents. This result agreed with the retirement literature which suggested that a drop in income was experienced when a person retired. Fifty-eight percent of the not retired individuals had income over $25,000 while only 25 percent of the retired financial managers had incomes of $25,000 or more.

Two hypotheses could not be statistically tested due to the small sample size. These hypotheses were the relationship between age categories and total income when marital-gender was controlled. Additionally, the relationship between retirement status and the total number of income sources was not statistically testable.

Credit

Financial managers were asked to indicate whether their family used credit, and if they did, the sources they utilized. For the 55 to 64 year old group, 81 percent used credit. In contrast, only 58 percent of the 65 and older sample used credit.

The top three sources of credit utilized by the highest percentage of 55 to 64 year olds were: credit cards, credit union credit, and bank credit. These were the same top three sources for the 65 and older group.

The median total number of credit sources utilized by each age group was two. Age categories and the number of credit sources utilized was significantly associated. Younger respondents were more likely to use one or two sources of credit compared to respondents 65 years and older who were more likely to use zero credit sources. Forty-one percent of the 65 and older respondents did not use credit while 69 percent of the 55 to 64 year olds used one or two sources of credit.

When all the respondents over 55 years old were asked about their credit and bill management, 77 percent seldom or never paid interest on charge cards. Sixty-one percent seldom or never worried about where the money came from to pay bills and only six percent made minimum payments on charge accounts usually or most of the time. It was concluded that most financial managers over 55 years old had few problems keeping up with credit charges or bills.

The three following hypotheses were not statistically testable due to the small sample size: the effect of retirement status on total number of credit sources, the relationship between age categories and total number of credit sources controlling for total income and education.

Debt

The three debt categories held by the highest percentage of respondents from 55 to 64 years old were: vehicle debt, mortgage debt, and credit card debt. The three categories held by the highest percentage of older respondents were: vehicle, credit card, and medical debt.

The mean total household debt category was $5,000 to $7,499 for respondents 55 to 64 years old, the median was $4,000 to $4,999, and the range was from zero to $75,000 to $99,999. For the older sample, the mean total household debt category was $2,000 to $2,999 and the median was zero. The range of debt was from zero to $49,999.

The mean total household debt for not retired respondents was $7,500 to $9,999 and the median was $5,000 to $7,499. The range of debt included no debts to $75,000 to $99,999. For retired respondents the mean total household debt category was $2,000 to $2,999 and the median was lower with $1 to $499. The range was smaller than recorded for the not retired individuals: no debts to $30,000 to $49,999.

Age categories were found to be significantly associated to the total amount of household debt and the total number of debt types. Younger respondents were more likely to have total debts greater than $7,500 (22 percent) compared to respondents 65 and older (13 percent). The 65 and older respondents were more likely to have no debt (53 percent) than younger respondents (29 percent).

When the total number of debt types was calculated, 52 percent of the older respondents had zero debt types while 26

percent of the younger respondents had zero debt types. Thus, compared to their younger counterparts, older respondents were twice as likely to have zero debt types.

Retirement status was also significantly associated with the total amount of household debt. Not retired respondents were more likely to have debt of $7,500 or more (43 percent) compared to retired respondents in the same debt category (22 percent). Retired respondents were more likely to have no debts (46 percent) than their not retired counterparts (29 percent).

Three hypotheses could not be tested due to the small sample size: the relationship between retirement status and the total number of debt types, the relationship between age categories and total household debt controlling for the marital-gender variable, and the relationship between total debt and age categories when household size was controlled.

Debt-to-Income Ratio

Each respondent's total debt category midpoint was divided by the total income category midpoint in order to calculate the debt-to-income ratio. The mean ratio for the 55 to 64 year olds was .44 and the median was .164. Thus, 50 percent of the 55 to 64 year olds had 16 percent or less of their income committed to debts. The ratio range was from 0.00 to 3.20. For respondents 65 and older, the mean ratio was .22 and the median was 0.00. The range of ratios was from 0.00 to 1.20. Younger respondents were more likely to have higher debts which contributed to higher debt-to-income

ratios. Older respondents who recorded lower incomes and debt still had less of their income committed to debts. The mean debt-to-income ratio for not retired financial managers was .472 and the median ratio was .20. The retired respondents means and medians were both lower. The mean debt-to-income ratio for retired individuals was .265 and the median was .02. It was suggested that the large difference between the mean and median for all the test groups were due to the few large debt-to-income ratios which highly skewed the means to a higher value.

Five hypotheses were formulated to test the relationship between the debt-to-income ratios and age, retirement status, education, household size, and marital- gender. Only one of these hypotheses was statistically testable. The relationship between age and the debt-to- income ratio was statistically significant. Fifty-three percent of the 65 and older respondents had a zero debt-to-income ratio. This was compared to the 28 percent of the 55 to 64 year olds. It was concluded that approximately 50 percent of the older group had zero percent of their income obligated to debt payments.

The remaining four hypotheses were not statistically testable due to the small sample size. The first hypothesis attempted to measure the association between retirement status and the debt-to-income ratio. The following three hypotheses involved control variables. They included the relationship between age and the debt-to-income ratio controlling for education, marital-gender, and household size.

Assets

Financial managers were asked to indicate the types of household assets they owned or were currently buying, the total value of their assets was estimated, and then the total number of assets were calculated. For financial managers 55 to 64, the top four types of assets held by the highest percentage were: own home, checking account, vehicle(s), and savings account. For respondents 65 and over, the top four types held were: own house (100 percent), checking account, savings account, and vehicle(s). The mean and median estimate of the total value of household assets for 55 to 64 year olds was $30,000 to $49,999. Sixty-one percent of the younger respondents had assets of $49,999 or less. The range for the total value of assets was from: $1,000 to $1,999 to $200,000 or more. For older respondents, the mean value of total household assets was $15,000 to $19,999 and the median value was $20,000 to $29,999. The range of assets went from: $1,000 to $1,999 to $200,000 or more.

When the sample was defined by retirement status, the mean and median estimate of household assets was again calculated. The mean total value of household assets for not retired respondents was $30,000 to $49,999 and the median value was $50,000 to $74,999. For retired respondents, the mean and median total value of household assets was $20,000 to $29,999.

The total number of types of assets held by retired and not retired respondents was also investigated. The mean and median for both groups was five asset types held. The range

of the total number of asset types held included the possibility of nine different types of assets. The not retired individuals had a range from two assets types held to nine. The retired respondents had a range from one to nine asset types held.

Age was not statistically related to the total value of household assets. It did appear that older respondents were more likely to record lower total values of assets than younger respondents.

Retirement status was statistically related to the total value of assets. Fifty-two percent of the not retired respondents had assets of $50,000 or more, in contrast to the 27 percent of retired respondents. Retired respondents were more likely to have assets of $0 to $19,999 (39 percent).

A valid statistical test could not be performed on three hypotheses due to the small sample size. The first hypothesis was the relationship between age categories and the total number of types of asset held. Secondly, the relationship between age categories and the total value of assets controlling for marital-gender could not be tested. The final hypothesis was the association between retirement status and the total number of types of assets held.

Implications and Recommendations

The results of this research have further implications for understanding the financial transitions of aging individuals, for professionals who work with families such as policy makers, and financial planners, and for future research.

Financial Transitions of the Aging

This research has outlined several key associations in the financial positions of families from two different older age groups with a financial manager over 55 years old. Changes in the sources of income, total amount of income, total number of income sources, the use of credit, total amount of debt, total number of debt types, the debt-to-income ratio, types of assets held, and the value of assets were some important findings.

First of all, the percentage of respondents in either age group receiving certain income sources changed. For the 55 to 64 year olds, the top sources of income included: savings interest, pensions, wages or salary, and social security. Three times as many older persons received social security retirement benefits as the 55 to 64 year olds. For older respondents, seven out of ten respondents recorded receiving pensions compared to five out of ten of the younger respondents. These results indicated that Social Security is almost universal and that pension income is not as comprehensive in the coverage of families over 65 years old.

Another important transition was shown when comparing

the percentage of respondents who received investments and savings interest. Younger and older respondents had approximately the same percentage receiving investment benefits. However, the similarity for savings interest was not the same. Forty-eight percent of the 55 to 64 year olds received savings interest compared to 73 percent of the older respondents. This does suggest that as people grow older and prepare for decreases in income, they plan for alternate sources of income. Older respondents probably liquidate investments and this leads to increases in savings interest. This savings interest is then more accessible to supplement the household income.

There are advantages and disadvantages to increasing liquid assets. The increase in liquid assets would allow for the payment of debts or bills (ex. medical bills) and everyday goods and services with relative ease. If these assets were still tied up in investments with long maturities, the money would not be readily available and families could be caught temporarily empty handed. The major disadvantage to liquidity is the loss of returns. When investments are liquidated, the liquid assets are often put into checking and savings accounts, which traditionally record low rates of return. There is the possibility that these returns would not keep up with inflation and that older families would actually lose purchasing power with their savings.

A decrease in the total income was prevalent when the two groups were compared. This agreed with research by Ruffin (1989) and Friedman and Sjogren (1981). However, a closer

look at the percent decrease in income and the consumption patterns of families over 55 is necessary. In this research the mean total income for the not retired individuals was $30,000 to $34,999. The mean total income for retired individuals was $20,000 to $24,999. This suggests that on average, as financial managers retired their total income dropped 30 percent. According to Hefferan (1981), middle income earner couples would need between 65 to 75 percent of their pre-retirement income to afford an equivalent level of living. This study suggests that on average, retired persons had 70 percent of the mean income received by the not retired group. This does imply that for this sample of financial managers and families, they were not living at a significantly lower level than their pre-retirement levels of living. Hefferan (1981) and Allan (1979) both suggested that due to changes in tax liabilities, savings, benefits, child rearing costs, employment costs, and investing, older families did not require the same income. The same level of living could be maintained with a 30 percent decrease in income due to the financial practices and characteristics of older families.

The results also indicated that the total number of income sources increased with the progress in age. This has two broad implications. First of all, the number of sources of income a family relies on for a steady income changes over time. In this study, the 55 to 64 year old financial managers were more likely to have one or two sources of income while the 65 and over individuals had three or four sources of income. Secondly, depending on the source on income, certain

families may have more difficulties maintaining a level of living established when they were younger. For example, some sources of income such as pensions, investments, and savings interest may not keep up with inflation. The rate of return on investments and savings may be zero or negative after the effects of inflation are considered. Some older families may need more sources of income in order to keep up with inflation because none of them may provide substantial income in periods of high inflation. This compares to younger families who may have wages or salary that are indexed to inflation.

The results collected on consumer credit have several implications. First of all, 58 percent of the 65 and over group used credit compared to 81 percent of the 55 to 64 year olds. This suggests that older respondents were less likely to be obligated to future payments on a good or service they received immediately. There could be several reasons for this result. First of all, this could be due to the ability of older consumers to pay for goods and services in cash because of their availability of liquid assets. Secondly, there may be fewer goods and services that older families require such as child care costs, work clothing, and transportation costs; therefore creating a smaller need for credit. Thirdly, the older respondents may have utilized credit less because of the social stigma this group has historically felt for incurring debt (Tongren, 1974).

The results on the total number of credit sources utilized by each age category confirmed that older respondents were more likely than 55 to 64 year olds not to use credit.

Younger respondents were more likely to be using one or two sources of credit. This is tied to their higher debt levels, discussed next.

The analysis on the total amount of debt, total number of debt types, and types of debt are consistent with the Life Cycle Hypothesis of Saving (Ando and Modigliani, 1963). The theory proposes that as people age, they are involved in low borrowing and high saving. Though this research could not confirm if the financial managers were savers, it certainly could reveal the total amount of household debts.

First of all, the types of debt used by the highest percentage of younger respondents were: mortgage on own home (34 percent), vehicle debt (45 percent) and credit card debt (29 percent). The 65 and older respondents recorded lower percentages for all three of these debt types. Most importantly, only nine percent of the older respondents still had a mortgage on their own home; thus approximately nine out of ten respondents in the older group no longer had to meet the requirements of mortgage payments. The other important result was the larger percent of the older group who had medical debt. Seventeen percent of the older respondents had medical debt compared to 13 percent of the 55 to 64 year olds. It appears necessary to consider medical debts as a significant contributor to the family debt of older families.

The relationship between age categories and the total amount of debt was statistically significant. The mean total amount of debt for the 55 to 64 year olds was $4,000 to $4,999. The mean total household debt for the 65 and older

group was $2,000 to $2,999. This difference in the mean total debt was about 50 percent. This drop in debt is important in association with the drop in average income. The ability to repay any debts through current sources of income had decreased because their incomes on average had dropped 30 percent.

A valid statistical test could not be performed between total debt and age categories controlling for household size and marital-gender. These hypotheses were included because of their possible future implications. The greater the number of family members in a household increases the likelihood of higher debt. The researcher was concerned that some older families might experience a migration of their children with grandchildren back into their households. This could be due to marital breakdown of the child's marriage placing the parents in the position of being financial and emotional supports. In addition, older children may still be living at home because they may not yet be able to afford their own accommodations. Therefore, the older parents become financial resources for their children. Unfortunately, the small sample size could not capture this relationship.

The marital-gender variable was included with the intention of testing for the difference between age categories and debt when marital status and gender was controlled. The researcher planned to look specifically at widows who, according to popular media, are sometimes subject to increasing financial debts in their older years. However, this hypothesis could not be tested due to the small sample

size.

The debt-to-income ratio revealed several important considerations. First of all, younger respondents were more likely to have more of their income obligated to debt payments. Secondly 18 percent of the 55 to 64 year olds had more total debt obligations than their current 1987 income (ratio greater than 1.00) could accommodate. This could be compared to only six percent of the older group who had ratios greater than 1.00. These ratios became more revealing when the retirement status of the respondents was considered. Both the not retired and retired individuals had a range of debt-to-income ratios from 0.00 to 3.20. However, 20 percent of the not retired individuals had debt-to-income ratios over 1.00 while only nine percent of retired individuals had debt obligations greater than their 1987 incomes.

There are specific implications for the families with ratios of 3.20. If three times the amount of a respondent's income was obligated to debt payments, the ability of the respondents to maintain a certain lifestyle may be jeopardized as they grow older. Older families experiencing lower incomes may be unable to pay off all the debts or their financial resources may be quickly depleted. These resources were probably supposed to last the rest of their lifetimes.

When age and the debt-to-income ratio were found statistically significant, the financial healthiness of the two groups became more visible. For the 55 to 64 year olds there was almost an equal percentage of respondents with debt-to-income ratios ranging from 0.00 to 3.20. However,

approximately 50 percent of the 65 and over group had a 0.00 debt-to-income ratio. This is good news for older respondents who, on average, were not paying for debts with their lower sources of income but instead were just paying for current consumption.

The final section discussing assets held by the over 55 years old sample and the total number and value of assets has several implications. First of all, the percentage of respondents recording certain types of assets changed depending on the age group. Three interesting results occurred. One hundred percent of the older respondents recorded owning their own house. No other asset type recorded a unanimous percentage. What this implies is that for the majority of families in this study, their house was probably their most important asset. This researcher was unable to determine the total value of the house separate from other assets. This could be important for families who may experience future financial difficulties (ex. medical bills). If a family had no liquid assets they would need to sell their house in order to pay bills.

Additionally, 55 percent of the 65 and older respondents recorded holding certificates of deposit compared to 35 percent of the younger respondents. This difference in the holdings of certificates of deposit could reflect the behavior of older respondents to change their assets into safer and more predictable forms of assets in order to supplement income.

The other major difference was the percentage of

respondents holding IRA's, Keogh and 403b funds. Almost, three times the number of 55 to 64 year old respondents held these types of funds compared to the respondents 65 and over. This researcher made several conclusions about this relationship. First of all, the older financial managers may have not had the opportunity to participate in these retirement plans. These funds may have been instituted after their retirement began or just before retirement commenced. A second reason why the older group may have held fewer retirement accounts could be due to the possibility that they had already used up these retirement accounts to finance previous current consumption.

Results about the total value of assets of retired and not retired respondents have several implications. First of all, according to Hogarth (1988), dissaving occurs in retirement in order to maintain consumption. Hogarth (1988) hypothesized that people age 65 to 85 dissaved at a rate of 2.9 to 3.7 percent per year. She also stated that 50 percent of her sample still managed to save. This information is important in the application of this study. In the current study, the mean total value of household assets was $30,000 to $49,999 for the not retired respondents. The mean total value of assets for retired financial managers $20,000 to $29,999. It did appear from these results that rural families did experience dissaving as they moved from being employed to retired.

Retirement status was significantly related to the total value of assets. Thirty-nine percent of retired respondents

had $0 to $19,999 of total household assets compared to 24 percent of retired individuals. This has several implications. Retired families were involved in liquifying financial and personal assets in order to maintain consumption. Secondly, the researcher had to consider that many retirees may have had few assets to liquify other than their homes. If a financial emergency were to arise, few respondents may have had any assets to liquify.

The data about income, credit, debt, assets, and the debt-to-income ratio provided many insights into the financial transitions of the aging process.

Public Policy

Federal and state governments have taken an active role in providing for the aging population through social security programs, tax incentives, IRA's, Keogh, and 403b funds, and welfare payments. There are many implications of this research for public policy.

First of all, Social Security was a source of income for 94 percent of the respondents over 65. This nearly universal program and the fact that it is one of the few sources of income that is indexed to keep up with inflation make it a very important source of income for older families. Policy makers should be encouraged to make sure the program continues and that the payments do continue to keep pace with inflation. This research also revealed that, 68 percent of respondents over 65 received pension income. Since only two-thirds of respondents received this source of income, the researcher saw

implications for more laws to increase more private pension development by private employers and to increase the number of plans that are indexed.

Another important implication for public policy was the drop in income by respondents as they aged. The data revealed a difference of 30 percent in income by respondents who were retired when compared to the not retired. In past research, by Hefferan (1981), this decrease was viewed as adequate to maintain pre-retirement levels of living. However, what happens to respondents who did not have an adequate level of living while they were working? Politicians at state and national levels should be concerned with families who receive more than a 30 percent decrease in income after retirement. This could place a family financially well below an acceptable level of living.

The final section on assets has several implications for public policy. The data revealed that dissaving occurred in order to finance consumption for retired families. To prevent large decreases in assets more families should be encouraged to participate in IRA's, Keogh, and 403b retirement plans. If more people were encouraged at a younger age (under 55 years of old) to participate in retirement instruments or savings plans, the financial security of their families should be more secure when they retire.

These implications for public policy re-emphasized the necessity for policy makers to consider the importance of programs to maintain levels of living upon retirement. Also, laws must be created or amended which encourage more private

employers to create pensions for their employees and to index them with inflation.

Financial Planners

Financial planners are often involved in developing financial plans for families to assist them in achieving certain financial goals. Often one of these goals is providing enough income to live a comfortable life after retirement.

First of all, financial planners often use ratio values to assess each clients's financial standing (Prather, 1990; Mason and Griffith, 1988). The financial planners who utilize some form of debt-to-income ratios can utilize the ratios in this research to see if their client fits into a normal spectrum of income obligated to debt repayments. An assessment of how healthy a family's finances can be compared to the mean, median, and range of the debt to income ratios developed in this research.

Secondly, financial planners must consider the debt of families prior to and post retirement. The planners may need to devise several strategies. One strategy could be used to handle debts while a the family still had a regular wage or salary. A second strategy would be developed for debts that occur after retirement, when the availability of income is less. The information on the total amount of debt could assist planners in understanding the average amount of debt that is typical prior and post retirement.

The growing number of professionals that are interested

in the financial health of older respondents can find specific utility in the results of this research.

Future Research

This research only covered a few issues dealing with the financial status of older families. However, several more questions could be covered in future research which would contribute to the field of retirement planning.

Since most of the past research on assets has been cross sectional, it would be valuable to consider some longitudinal research. The majority of individuals in the United States are experiencing extended life spans. There has been limited research on what happens to their finances past 75 years of age. Since some of the consumption during retirement is financed through liquid assets, it would be helpful to see if older families actually have liquid assets available for consumption needs after 75 years of age. More information is needed about the rate of dissaving for individuals, and if there are any fluctuations in dissaving as individuals progress from age 60 to 90 and possibly 100. Do families have enough savings to support the entire uncertain lifetime or will their assets be depleted before their lives terminate?

A second area of future research could study liquid assets in order to test a different ratio; the liquid assets-to-total debt ratio. According to Prather (1990) and Mason and Griffith (1988), liquid assets could be used to repay part of the debt burden. The ratio would give some indication of the ability of families to use some of their liquid assets to

repay debts.

Another area for future research are some descriptive studies looking at the decision making processes and the decisions made about retirement planning. Do families seek professional help in planning for retirement? What kinds of plans do they implement? At what age do they start making plans for retirement? Financial planners could use this research to better assist families in their plans. Also, planners could develop informational packages to assist employers in the provision of information to young employees about aspects of retirement planning.

Assumptions and Limitations

There were two assumptions which must be noted. The primary assumption in this research concerned the inferences made from the cross sectional data. Longitudinal assumptions were made from this cross sectional data; projections about the future of the younger respondents (55 to 64) were made using the results from the older respondents (65 and over). Also, assumptions about the prior financial statuses of older respondents were made from the data collected on the younger respondents.

The second assumption of this research was that the primary financial manager actually knew all the information necessary for the completion of the questionnaire and filled out the questionnaire independently.

This researcher acknowledges several limitations to this study. First of all, the generalization of the results is

limited. Since the questionnaire data was collected from two Michigan rural counties, the results of the study can only be generalized to the other rural counties in Michigan.

The second limitation has to do with the accuracy to which people recorded financial information on the questionnaires. Respondents in questionnaires are often not willing to tell researchers about their financial backgrounds. Therefore, some of the results may be biased due to underestimation or over estimation (Schulz, 1985). Also, the 19 page questionnaire may have caused some inaccuracies. Individuals may have been distracted by the length of the questionnaire. Respondents may have quickly completed the forms to save time, or grown tired, and therefore may not have carefully followed all of the directions.

The next limitation is a problem with the cohort itself and research performed in questionnaire form. Schulz (1983) indicated that older persons tend to underestimate any problems by recording lower amounts of debt or by limiting the information given. This could be significant in this research study.

A fourth limitation of this study was due to the choice of this researcher to combine the two counties into one sample. Because the sample of 143 cases was combined, the environmental effect of a family's residence in a particular county was not able to be measured.

Since this study was derived from secondary analysis, the researcher had to accept the limitations of the data questions and sample. The majority of this questionnaire was

based on financial questions. However, a limitation is that there are always different methods of acquiring financial information or in specifying information. For example, nominal data would have provided the researcher with a clearer picture of the amount of income, assets, and the debt-to-income ratio.

A major limitation of this study was the sample size. The majority of the hypotheses including control variables could not be performed due to small sample sizes. A larger sample of financial managers over 55 would have allowed for these hypotheses to be tested.

Another limitation was that there was no definition of retirement. Respondents individually determined their employment-retirement status. This caused several problems because the researcher did not know how respondents defined retirement. Did the respondents consider themselves retired if they were no longer working at their primary occupation or were they retired even though they were working part time at a different occupation? Finally, if they were working at a new occupation different from their primary occupation, did they still consider themselves employed? This created several difficulties. First of all, many individuals may not have been properly classified by retirement status and this would have distorted the results of this study for each test variable.

The next limitation was due to the ordinal classification of total debts, income, and assets. The total value of each of these variables was grouped into broad categories. This

classified respondents together who may have had close to a $20,000 difference in income, assets, or debts. This created a further limitation when data was recoded for analysis. For example, all 15 debt categories were recoded into three categories to allow for a valid statistical test. In deciding to collapse the categories, the researcher realized the ability to distinguish between individuals with $20,000 and $40,000 worth of debt was no longer possible because these respondents would both be classified into one category; $7,500 or more.

Another limitation of ordinal data was the ability to create accurate debt-to-income ratios. The researcher had to create debt-to-income ratios from mid points of total debt and income categories. Once again these categories were not of equal size. A better ratio could have been performed using actual nominal data.

The next limitation relates to the ages of the respondents. Because the oldest respondent in this sample was 86 years old, the results are limited to those individuals between 55 and 86. Since more individuals in the United States are living longer than 86 years of age, this study should only be applied to individuals up to this age.

A major concern related to the financial status of older individuals is the changes in income over time. This could not be truly captured with cross sectional research. According to Ruffin (1989), cross sectional research on older families usually makes the proportion of older households with lower income appear smaller. Longitudinal data would possibly

show an increased incidence of older families with low incomes as they age and when family composition changes upon the death of one member. This research must consider the capsule of time that income totals were recorded and be careful not to generalize for all older families as they age through the later life stages.

One final limitation was the total value given for the amount of household assets. The mean total values and the range for financial managers 55 to 64, 65 and older and families appeared to be too low to be realistic. It appears as though some of the respondents may have forgotten to include the value of their house in the calculation, only including personal property.

Conclusion

This research was performed to develop a better understanding of the financial status of the growing number of older families in United States. The study focused on the role of income, credit, debt, and assets in the family portfolio. The major contribution of this research was the development and testing of the debt-to-income ratio. It was included as a variable which would provide a better understanding of the healthiness of a family's financial situation.

The results of this study have implications for the number of professionals who work with older families. These professionals may be financial planners, policy makers, educators, gerontologists, and economists who require a better

understanding of the financial transitions made in the aging process. Future research is required to reveal more specific information about how the decreases in income after retirement affect the level of living. Also, further research could describe the decision making process involved in retirement planning. Finally, future research could investigate the actual amount of dissaving that occurs after retirement and the effects on the family assets over time.

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APPENDIX

APPENDIX A:

SELECTED QUESTIONS FROM THE FAMILY ECONOMIC WELL-BEING SURVEY: FINANCIAL MANAGER QUESTIONNAIRE

SELECTED QUESTIONS FROM THE FAMILY ECONOMIC WELL-BEING SURVEY: FINANCIAL MANAGER QUESTIONNAIRE

A. 1. Most of us have ways to handle our finances and time. Please circle how often you:

h Pay interest on charge accounts

Never	1
Seldom	2
Occasionally	3
Usually	4
Most of the Time	5

n Worry about where the money will come from to pay bills

Never	1
Seldom	2
Occasionally	3
Usually	4
Most of the Time	5

o Make only minimum payments on charge accounts

Never	1
Seldom	2
Occasionally	3
Usually	4
Most of the Time	5

2. What types and sources of credit do you or your family normally us, excluding mortgage and/or business credit? (Circle <u>all</u> that apply.)

a	Credit card	e	Pawn broker
b	Bank	f	Friends
c	Credit union	g	Family
d	Finance company	h	Don't use credit

C. 3. At the present time are you:

1 Employed or self-employed
2 Unemployed
3 At home full time (not employed)
4 Retired

H. We'd like to ask you a few questions about the people who usually live with you. Please start with yourself.

1. Who lives in your household?

		Sex (Circle)			Age on last birthday
a	You	1	M	F	2 _____
b	Spouse (if any)	1	M	F	2 _____

Children and/or stepchildren living with you. Fill in the ages: leave blank if no children living with you.

c Sons: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 ___

d Daughters: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____

Other adults and/or family members living with you. Please fill in the age and relationship (friend, grandfather, etc.) for each person:

	Age	Relationship
e	1 _____	2 _____
f	1 _____	2 _____
g	1 _____	2 _____

2. What is your <u>present</u> marital status? (Circle only one.)

1 First marriage _____number of years
2 Separated
3 Widowed
4 Divorced
5 Remarried _____number of years
6 Never married

3. What is the highest number of years in school you have completed (high school graduate=12 years; 1 year college or trade school=13 years; B.S.=16 years; etc.)

_____years

These questions are about your shared family or household income.

5. There are many sources of household income. Circle all the sources you have for you and your family.

a Wages or salary from job
b Your own business
c Savings interest
d Investments
e Pensions
f Alimony, spousal maintenance
g Child support
h Scholarships for education
i Gifts from family
j Social Security (Survivors, disability retirement)
k AFDC, General Assistance, SSI
l Worker's Compensation
m Farm Support Programs
n Rental income
o Other (specify)_____

6. Now, think about the <u>total 1987 income before taxes</u> for your household from all the above sources. The total amount is: (Please circle the <u>one</u> that applies for your household)

1 Less than $5,000
2 $5,000 - $9,999
3 $10,000 - $14,999
4 $15,000 - $19,999
5 $20,000 - $24,999
6 $25,000 - $29,999
7 $30,000 - $34,999
8 $35,000 - $39,999
9 $40,000 - $44,999
10 $45,000 - $49,999
11 $50,000 - $59,999
12 $60,000 - $69,999
13 $70,000 - $79,000
14 $80,000 - $99,999
15 $100,000 and over

7. Please circle all the household and business/farm assets you (and your spouse, if married) own or are currently buying.

<u>Household</u>

a Own home
b Second home, vacation home
c Any vehicles
d Checking account
e Savings account
f Certificate(s) of deposit
g Stocks or mutual funds
h IRA, KEOGH, 403b funds
i Other: jewelry, antiques, household possessions, etc.

<u>Business/Farm</u>

j Business
k Vehicles if used in business
l Farm land, rental property
m Livestock, farm equipment and buildings, etc.

8. For only your household assets, what is your estimate for the total value? (Circle the one that applies.)

1	$0 - $999	9	$15,000 - $19,999
2	$1,000 - $1,999	10	$20,000 - $29,999
3	$2,000 - $2,999	11	$30,000 - $49,999
4	$3,000 - $3,999	12	$50,000 - $74,999
5	$4,000 - $4,999	13	$75,000 - $99,999
6	$5,000 - $7,499	14	$100,000 - $199,999
7	$7,500 - $9,999	15	$200,000 or more
8	$10,000 - $14,999		

9. Please circle all the categories in which you (and your spouse, if married) have any debts.

Household		Business/Farm	
a	Mortgage on own home	j	Your business
b	Mortgage on rental property or other home(s) or real estate	k	Vehicles
		l	Farm land
		m	Rental property mortgage
c	Automobile or other vehicle loan(s)	n	Livestock, farm equipment and buildings, etc.
d	Credit card		
e	Home improvement loans(s)		
f	Educational loans(s)		
g	Doctor, dentist, hospital, nursing home bills		
h	Loan(s) owed to friend, family member		
i	Other:_____		

10. Think about all of your household debts circled above. What do you estimate is the total amount of these household debts? (Please circle the one category that applies to you.)

1	$0; no debt	9	$7,500 - $9,999
2	$1 - $499	10	$10,000 - $19,999
3	$500 - $999	11	$20,000 - $29,999
4	$1,000 - $1,999	12	$30,000 - $49,999
5	$2,000 - $2,999	13	$50,000 - $74,999
6	$3,000 - $3,999	14	$75,000 - $99,999
7	$4,000 - $4,999	15	$100,000 or more
8	$5,000 - $7,499		