AN ABSTRACT OF THE THESIS OF

ROBERTA VALE EBERT for the degree MASTER OF SCIENCE
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Title: COST DIFFERENTIALS OF OWNING VERSUS RENTING SHELTER DURING THE RETIREMENT STAGE OF THE LIFE CYCLE

Abstract approved by: ______________________
Martha A. Plonk

The purpose of this study was to compare differentials in housing costs between renting and owning.

The data were obtained from a sample of 60 household heads who were listed as retired in the city directories. They met the following criteria: lived independently in the community, were 65 years of age or older, and were willing to cooperate in the study. The sample was equally divided between homeowners and renters. The 60 household heads were interviewed in their homes during the spring of 1974 by the author who recorded their answers on the interview schedule.

The questions on the interview schedule concerned: (1) demographic information, (2) description of the housing, (3) housing expenditures, and (4) property tax relief and deferral information.

The 30 renters had a mean age of 77 and the 30 owners had a a mean age of 75. Four of the renters were married and 19 of the owners were married. Seventy percent of the 60 household heads listed their health as good or excellent. Sixty percent of the 60 household heads completed one or more years of college. The mean income of the 30 renters was $4,587 and the mean income for the 30 owners was $8,912. The mean number of years the household heads had been retired was ten.

The mean number of years the renters lived in their present housing was ten years while the owners lived in their present housing a mean of 24 years. Renters' housing was smaller in size then the homeowners.

The mean total housing expenditure per annum for the 30 renters was $1,985. Housing expenses included $1,659 for rent and $18 for insurance. Operating expenses included $126 for electricity, $44 for gas or oil, $4 for garbage collection, $2 for water and sewer, $14 for television cable, and $86 for telephone. Other expenses included $30 for house cleaning and $2 for yard work.

The mean total housing expenditure per annum for the 30 owners was $2,241. Housing expenses included $87 for mortgage, $292 for taxes, $81 for insurance, $140 for maintenance and repair, and $1,007 for interest forgone. Operating expenses included $178 for electricity, $173 for gas or oil, $29 for garbage collection, $73 for water and sewer, $34 for television cable, and $113 for telephone. Other expenses included $14 for house cleaning and $20 for yard work.

The renters paid 13 percent more on housing expenses than owners. Owners paid 13 percent more on operating expenses than renters. However, other expenses were about the same for both renters and owners for house cleaning and yard work.

Hypothesis 1. Hypothesis 1, there is no difference in the average dollar expense of shelter for homeowners and renters, was rejected as there was a significant difference at the .01 level between the housing cost of owners and renters. The mean housing costs were $1,985 for renters and $2,241 for owners.

Hypothesis 2. Hypothesis 2, there was no difference in the percentage of income spent for shelter between the elderly who rent and who own their housing, was accepted as there was no significant difference between the mean percent of income spent on housing of the renters, 44 percent, and the owners, 37 percent.

Hypothesis 3. Hypothesis 3, there is no relationship between the size of the house and the expenses of housing for the elderly, was rejected at the .05 level. The yearly mean renter use cost per square foot was $2.24. The yearly mean owner use cost per square foot was $1.65.

Hypothesis 4. Hypothesis 4, there is no difference in the percentage of the elderly homeowners and renters who use property tax relief, was accepted as there was no significant difference found between the renters' and owners' use of property tax relief. Twenty-seven of the 30 renters and 23 of the 30 owners used some type of property tax relief. The total housing expenditures were reduced by nine percent for both renters and owners by the use of property tax relief.

Cost Differentials of Owning Versus Renting Shelter
During the Retirement Stage of the Life Cycle

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Roberta Vale Ebert

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Associate Professor of Home Management
in charge of major

Redacted for privacy

Head of Department of Home Management

Redacted for privacy

Dean of Graduate School

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Typed by Illa W. Atwood for Roberta V. Ebert

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COST DIFFERENTIALS OF OWNING VERSUS RENTING SHELTER DURING THE RETIREMENT STAGE OF THE LIFE CYCLE

I. INTRODUCTION

"Economists have struggled for years to develop satisfactory ways of studying the economics of renting versus buying" (23:30). So far, there has been no simple answer to the question of owning versus renting housing (17:459). Many factors influence whether renting or owning is a better choice for the individual. Some of these factors are the state of the national economy, the local housing market, the stage of the life cycle, and the economic resources of the family at the time the decision of owning versus buying housing must be made.

The 1970s have been an inflationary period with the cost of living rising faster than income. Real estate is an investment which is considered a hedge against inflation (38:72). During inflationary periods rent tends to increase on the average of every two years while the homeowner's mortgage payment remains stable. Mortgage payments remain stable because contracted interest rates on housing mortgages have not risen with inflation. If the property is refinanced, the interest may change to a higher interest rate. However, the homeowner can expect to have an increase in property tax during a period of inflation.

Inflation can increase housing costs. "Housing industry statisticians estimate that the average American house increases in value by five percent a year" (23:30). While this national average was for the United States in 1970, local areas have had a different average. Housing values in desirable locations have increased to as high as ten percent a year; however, in areas where there was a surplus of housing, housing values have remained constant or decreased. In 1971, Main compared cost of spacious old houses sold in Washington D. C. and New Jersey. He found a $20,000 to $30,000 difference for the same type of housing between the two areas (23:31).

The elderly have increased in number during the past years. In 1969, people 65 and over represented 9.9 percent of the total population (52:23). This segment of the population increased at a rate of 1,000people per day in 1973, which was greater than for the under 65 rate (2:4).

In 1970, the percentage of people 65 and over in Oregon was 10.8 percent (44:39-54). This percentage was 0.9 percent higher than the average for the United States for the same age group. Between 1960 and 1970, the 65 and over Oregon population increased 23 percent (34:1).

The years 65 and over represent the retirement period in the life cycle. During this time, a person may question the value of owning a house when renting offers freedom from house and yard upkeep and maintenance (18:469). As a person ages, there is also a greater chance that one member of the family will become widowed and live alone. Economists suggest the single heads of households would be better off renting instead of owning (17:421). While the number of people in a household can influence the need for housing, the elderly do not seem to make housing changes as easily as other aged groups.

> It is not surprising that the aged are reluctant stayers and reluctant movers. Whether they move or are "relocated," the trade of a clean new apartment for the losses of important familiar things does not seem much of a gain. Also, the frustrations of the many aspects of moving and the tax on energy are high, too high for many elderly to change residence (6:167).

The elderly voice more complaints about their housing, but move less than people under 65. Birren cited the lack of money for alternate living arrangements as the reason for the elderly being "locked" into housing which no longer fits their life style (6:164).

Reason for the Study

The United States Department of Labor's Bureau of Labor Statistics prepares budgets at three levels, lower, intermediate, and higher for an urban retired couple. These budgets are based on the cost of goods and services needed to provide for health and well being (46:1). In 1970, all three budget levels for couples 65 and over budgeted between 34 and 35 percent of the income for housing. The budgeted housing expenses included housing and housing operation expenses.

By 1972, the budgets for housing costs for the retired couple had increased to 37 percent of the income of the two higher income groups. However, housing expenses had increased to 40 percent of the lower income budget (15:45).

Expenditures may vary widely from the budgets. For example, a May 1972 news release on the cost of housing for the elderly in Corvallis showed that some elderly spend over two-thirds of their income on shelter (14:1). One woman cited in the article had an income of $138 a month and spent $98 or 71 percent of her income on housing.

Concern over housing costs were expressed by the elderly when they testified at the United States Senate Special Committee on Aging in 1969. The poor and improvished elderly claimed that property taxes alone cost them from one-third to one-half of their income (51:21). If one segment of housing costs can take such a large chunk of the elderly's income, research on housing costs will be helpful to persons working with the elderly to assist them in making a more informed decision concerning housing.

Statement of the Problem

This study investigated differentials in costs between owning versus renting shelter during the retirement period of the life cycle. The use of property tax relief was also investigated. When tax benefits are used they "are shown to be equivalent to a reduction in the price of housing" (1:789).

Hypotheses

1. There is no difference in the average dollar expenditures of shelter for homeowners and renters.

2. There is no difference in the percentage of income spent for shelter between the elderly who own and who rent their housing.

3. There is no relationship between the size of the house and the expenses of housing for the elderly.

4. There is no difference in the percentage of the elderly homeowners and renters who use property tax relief.

Assumptions of the Study

It was assumed the questions were answered truthfully by the household heads to the best of their knowledge and ability. If there was no written records of the yearly expenses, an estimate of the housing expenses was made.

Definitions of Terms

1. Elderly or aged refers to heads of households age 65 and over.

2. Housing, according to Beyer's definition, "has a fixed

location, being used only in the place where it was built . . . Housing is not only sold but also rented" (5:3).

3. Shelter or housing expenditures:

A. For homeowners, shelter expenditures includes the annual payments on the mortgage, taxes, insurance, fuel, utilities, repairs and maintenance expenses.

B. For renters, shelter expenditures includes the monthly rent payments, utilities, insurance, and in some cases, maintenance of the grounds.

4. Interest forgone is the amount of return the homeowner could expect to receive if the owner's equity in the property had been invested in income-producing assets. For this study the interest forgone was computed at six percent of the appraised property value.

II. REVIEW OF LITERATURE AND RELATED RESEARCH

This chapter examines demographic data about household heads aged 65 and over, their housing characteristics, property tax relief and tax deferral, and related research in home economics. The demographic data includes the number of people 65 and over in the United States, their marital status, level of education, status of their health, retirement, and income. The housing section includes living arrangements, the economics of shelter, and housing expenses. Under property tax relief and tax deferral, the Homeowners and Renters Property Tax Refund, the Veteran's Property Tax Exemption and the Deferral of Residential Ad Valorem Taxes are discussed.

Demographic Data

Numbers of People Aged 65 and Over in the Population

In 1900, three million people or 4.1 percent of the total population in the United States were age 65 and over. By 1972, this segment of the population had increased to 9.9 percent or 20 million people (52:23). The percentage of people 65 and over is expected to continue to increase over the next few decades (4:333).

The Oregon population aged 65 and over was 183,645 in 1960. By 1970 this segment of the Oregon population had increased 23 percent to 226,799. In Oregon, 10.8 percent of the population was 65 and over in 1970, which was 0.9 percent higher than the percent of population 65 and over for the United States (43:39-54).

In 1970, the population aged 65 and over for Corvallis was 2,310 or 6.6 percent of the total population of 35,153. This percentage was 3.3 percent lower than the percentage for the United States and 4.2 percent lower than for the percentage for Oregon for this age group (43:39-76).

Marital Status

Reports from the 1963 Social Security Survey of the Aged showed that "Of couples age 65 and over, three-fifths were less than 73 years old but of the nonmarried units, almost three-fifths were 73 years old or older"(12:42). By 1968, 52 percent of those aged 65 or over were married, 39 percent were widowed, and nine percent were single (3:19).

In 1972, seventy-seven percent of the men aged 65 and over were married, 16 percent were widowed, two percent were divorced and five percent had never married. While the majority of the men were married, the majority of the women were single. Thirty-eight percent of the women were married, 53 percent were widowed, two percent were divorced and seven percent had never married (50).

In Oregon, in 1970 eighty-two percent of the household heads of the 65 to 69 age group were married. The remaining 18 percent were divided equally among widowed, single, and divorced. Of those 70 to 74 years of age, 78 percent were married, seven percent were single, eleven percent were widowed, and five percent were divorced. Those ages 75 to 79, seventy-three percent were married, six percent were single, 27 percent were widowed, and four percent were divorced. Of those 80 to 84 years of age, 60 percent were married, eight percent were single, 22 percent were widowed, and four percent were divorced. And for those 85 and over, 45 percent were married, 12 percent were single, 40 percent were widowed, and three percent were divorced (44:39-343).

Level of Education

Older people today tend to have less education than younger people. Of the 65 and over age group, the oldest persons in this age group had less education than those just retired. In 1963, only 19 percent of the people over age 80 had one or more years of high school and only eight percent of this age group had one or more years of college. For the 60 to 65 age group in 1963, 32.3 percent had completed one or more years of high school and 19.4 percent had completed one or more years of college (28:113).

In 1970, the United States median education level was 8.8 years for those 65 and over (41:1-83). The median years of school completed for the 65 to 69 age group was 8.8, for the 70 to 74 age group it was 8.6 and for the 75 and over age group it was 8.3 years of formal education (41:1-627).

The Oregon median educational level in 1970 was 8.8 for the men and 10.1 for the women 65 and over (44:39-356). The median years of school completed for both men and women in the 65 to 69 age group was 10.0, for the 70 to 74 age group it was 9.4, and for the 75 and over age group it was 8.8 years of formal education (44:39-341). Oregon had a higher median educational level than the United States median level.

Status of Health

In 1972, the United States Public Health survey showed health problems were more likely to affect people age 65 and over than those under 65 (48:6, 49:3). Acute short-term illness tend to peak at age 17 and is lowest at age 45 (40:8). However, chronic long-term illness starts rising at age 45 and increases rapidly after age 65. Two of every five persons aged 65 and over reported some degree of limited activity due to chronic illness compared with one of five persons between 46 and 64 years old (48:6).

Of the people 65 and over who were not institutionalized in 1972, 85 percent had one or more chronic conditions (50). "The most prevalent chronic conditions are arthritis and rheumatism, heart disease, and high blood pressure" (4:115).

The length of illness also increases with age. For persons between ages 25 and 44 the average length of illness was 15 days per year. Between ages 45 and 64, the average length of illness was 23 days per year; and for people 65 and over the average length of illness was 37 days per year (47:22). From 1970 to 1972, the average length of illness for people aged 65 and over increased five days (48:7, 47:22).

People over age 65 visited physicians more frequently than did people under 65 in 1972. The people over age 65 averaged seven visits per year while people under age 65 averaged five visits per year. There was a 25 percent chance a person 65 and over would have been hospitalized during the year which was twice as great as for people under 65. Once in the hospital, persons 65 and over averaged 18 days per year while persons under age 65 averaged nine days per year (50).

"The health of the population is no better than the aggregate health of segments of the population" (36:166). For this reason society must determine to what degree people experience good health in order to identify and understand health problems. One method of appraising the health of an individual is by asking the person to rank his health on a seven-point scale from good to poor health (4:114). Tissue stated that while this self-rating health scale is commonly used, it tends to rate the self-image of the person who is being interviewed rather than his medical rating (37:93). The researcher should not let this limitation stop him from using this method. This type of research is of value to the analyst who deals with the aged because it "represents an economical and dependable means to combine elements of functional capacity and evaluative responses in a single measure" (37:94).

Retirement

The percentage of people age 65 and over who continued as wage earners has decreased from 33.2 percent in 1948 to 18.3 percent in 1958 (36:343). By 1972 the percentage of this age group in the labor force had decreased to 16 percent (50).

The number of men 65 and over in the labor force had decreased from two out of three in 1900 to one out of four in 1972. The number of women 65 and over in the labor force had increased from one out of 12 in 1900 to one out of 10 in 1972 (50).

In 1971, Fillenbaum reported on a long-term study started in 1961 on 308 men of retirement age and 161 preretired men in North Carolina and Virginia. The preretired group was interviewed in 1961 and 1966. In the 1961 group, of those who were of retirement age, 31 percent had continued to work for pay after age 65. Of men who had reached retirement age in 1966, 41 percent had continued to work for pay after age 65 (13:83). The characteristics of the men who did not work for pay after retirement was compared to those who continued to work for pay after retirement. The working retired had a higher educational level, had made preretirement plans, reported better health, and had a higher income level than the non-working retired (13:89).

In 1900, sixty-seven percent of the men aged 65 and over were employed, but in 1971 only 21 percent of the men in this age bracket were in the labor force. In 1900, eight percent of the women were employed, but in 1971, ten percent of the women in this age bracket were in the labor force. "The two million older men and one million older women in the labor force are, however, disadvantaged by over-representation in the lower paid pursuits" (9:37). Even though their pay was low, the employed older person had almost twice the median income as the elderly who did not work.

Income

People 65 and over receive income from different sources.. They received 46 percent from retirement benefits, 29 percent from employment, 15 percent from assets, three percent from veteran's benefits, four percent from public assistance, and three percent from other sources. Retirement benefits include Social Security benefits, other public programs, and private pensions (9:10, 4:141).

Social Security benefits were designed to supplement income from savings and investments the individual had acquired over time (24:3). Although Social Security benefits provides only 34 percent of the total income for the people 65 and over, 86 percent of the elderly have this source of income (4:141).

Private pension plans have not been available to all people in the past. Only 12 percent of the retired people receive income from this source. One problem with these plans is that retirement credits are not transferable to another plan if the employee changes jobs or the company is no longer in operation by the time the person reaches retirement age (4:143).

Only one percent of the aggregate income of the elderly comes from cash contributions from relatives (4:143).

Half of the 65 and over household heads have income from some assets. Assets account for only seven percent of the aggregate income for people 65 and over. Veteran's benefits and other public assistance accounted for only seven percent of the elderly's income, yet 22 percent of the elderly receive income from these sources (4:143).

The income of each generation of older people has increased from previous age groups of older persons. The retired person's income is still low in comparison to other segments of the population. Table II-1 shows the median income of the over 65 age group was less in 1970 than for the under 65 age group for both single individuals and couples in the United States (8:1).

Table II-1. Median income per year in 1970.

Family Status	Under 65	Over 65
Single individuals	$ 4,616	$ 1,951
Couples	10,541	5,053

Source: Herman B. Brotman. Facts and Figures on Older Americans, No. 3. Income and Poverty 1970. 1971, p. 7.

In 1971, the income for the 65 and over population in the United States was higher for couples than for single individuals (50). Fifty-one percent of the couples had incomes under $5,000 while 87 percent of the individuals had incomes under $5,000 (Table II-2).

Table II-2. Distribution of income for people 65 and over in 1970.

Individuals Income	Percent	Couples Income	Percent
$5,000 or more	13	$10,000 or more	17
3,000 to 5,000	18	5,000 to 10,000	32
2,000 to 3,000	24	3,000 to 5,000	30
1,000 to 2,000	35	1,000 to 3,000	20
Under $1,000	10	Under $1,000	1

Source: U. S. Department of Health, Education, and Welfare. OHD. Administration on Aging. New Facts about Older Americans. June, 1973. (DHEW publication No.(SRS) 73-20006)

Table II-3 shows that income decreased as the person aged. Single people had less income in 1973 than couples, and female single household heads had less income than male household heads.

Table II-3. Income of persons 62 and over in 1973.

Family Status and Age	Median Income	Mean Income
All couples 62 and over	$ 6,323	$ 8,620
62-64 couples	9,963	11,800
65-72 couples	6,258	8,237
73 and over couples	4,630	6,306
All single families 62 and over	2,314	3,411
All male single families 62 and over	2,620	4,043
62-64 single males	4,516	6,524
65-72 single males	2,787	4,343
73 and over single males	2,293	3,021
All female single families 62 and over	1,835	2,643
62-64 single females	2,776	3,916
65-72 single females	2,038	3,008
73 and over single females	1,615	2,007

Source: U. S. Bureau of Census, Census of Populations 1972, Current Populations Reports, Consumer Income. Series P 60 No 90, 1973. p. 116.

Related Research in Home Economics

In 1966, Kitchens studied retired single women household heads living in retirement housing in Portland, Oregon. The median age of the women interviewed was 74 years. These women had voluntarily moved into the retirement housing which required an entry fee and monthly charges (21:24). In 1968, Eichelberg also studied retired single women household heads. These women were living independently in single family detached dwellings. Seventy-nine percent of the women living independently owned their own home, and 21 percent were renters (11:18). Eichelberg reported 20 percent of her sample had never married, 76 percent were widows, and four percent were divorced (11:18).

Research studies on retired couples in Oregon were done in 1966 by Crabtree, in 1969 by Hansen, and in 1971 by Pulley. Crabtree interviewed 60 retired couples about their financial resources. The couples were living in a retirement village near Portland in which they had bought housing with the plans of retiring there. The incomes of the couples ranged from $1,992 to $23,680 per year with a mean income of $5,738 and a median income of $4,828 (10:40, 42-43).

Hansen interviewed 102 retired couples living in Corvallis, Oregon, about their home managerial tasks. The median age of the men was 72 and the median age of the women was 68 (19:44). The men had been retired an average of five years. Sixty-seven percent of the couples had mortgage-free homes, but 22 percent were still making payments, eight percent were renters, and the remaining three percent were living in retirement housing (19:50). Their housing ranged from three to ten rooms with an average of six rooms for each couple.

Pulley interviewed retired couples who were living in an adult community where they were buying housing which ranged from $25,000 to $45,000 (27:25). The men had a median age of 70 and the women had a median age of 68 (27:31). The mean retirement age for the men was 65 (27:32). The mean income for the elderly couples was $9,720 (27:39). Mean housing expenses were $1,538 (27:51).

Kirkpatrick investigated housing values of 45 retired couples living in Colorado in 1971. In her study, 11 percent of the couples had incomes below $3,000, 85 percent had incomes between $3,001 and $10,000 and four percent had incomes over $10,000 (20:30). In this study 85 percent of the couples were in the middle income bracket of $3,000 to $10,000.

Housing

Living Arrangements

The 1963 Social Security Survey of the aged stated that "the couple is often faced with the decision . . . to maintain a larger-than-needed home as children leave" (12:166). But many times this decision is put off until the elderly are forced to move because of health reasons or because of neighborhood blight. Even so, the elderly often resist moving in spite of negative features in their housing and neighborhood. "They remain in the neighborhood even though they lack friends and relatives" (51:7). Low rent housing with elderly peer groups has not motivated the elderly to change residences.

The 1963 Social Security report showed parent-child relationships were important to the life of the person 65 and over. In this report about half of the elderly lived within a 30-mile drive of one of their children (12:164). Seventeen percent of the widowed or divorced men and 19 percent of the widowed or divorced women lived with their married children (12:161). However, nearly 70 percent of the couples and 60 percent of the nonmarried did not live with a relative in 1963 (12:159). Sixty-six percent of the people aged 65 and over were couples living as a family. The majority of the single household heads lived alone in separate housing.

In 1970, only five percent of the elderly in the United States lived in an institutional type setting (4:272). The remaining 95 percent lived independently in the community. Eighty-six percent of the men and 44 percent of the women were household heads. Although eight percent of men lived alone, 49 percent of the women lived alone. Only two percent of both men and women lived with relatives.

Housing Expenses

One method of determining the differences in cost of renting or owning housing is to compare housing expenses (16:18). Ownership costs include explicit and implicit expenses and these costs are related to the value of the property.

The explicit expenses for homeowners include taxes and insurance and those with mortgage payments have the interest on the unpaid balance and the principal (18:462). The implicit expenses for both mortgaged and mortgage-free homes include the interest forgone on the owner's equity, depreciation, and maintenance and repairs.

In 1970, sixty-seven percent of the people age 65 and over in the United States owned their own homes, and 80 percent of these homes were mortgage free (24:5).

While taxes have remained from one to three percent of the property value, the value of property has increased (29:67, 18:462). Homeowners insurance has also remained constant at one-half to one percent of the property value (18:462).

Many times the implicit expenses are hidden expenses and are not included in a budget. Interest forgone is one of these hidden expenses. It is the amount of return the owner can expect to receive if the money had been invested in income-producing assets. In 1965, interest forgone was five to six percent of the property value. By 1970, the interest forgone had increased to six to nine percent of the property value (17:414, 18:462).

Depreciation, maintenance and repairs have remained stable for the last decade at one to three percent of the property value (29: 67, 18:462).

The 1970 census showed the United States median property value for homeowners was $12,000 for couples 65 and over, but only $10,000 for single household heads (24:5). The Oregon median property value for homeowners 65 and over was $12,240. This was only $240 higher than the national median housing value for that age group. The median value was $12,840 for male household heads and $11,240 for female household heads (34:49).

For renters, expenses included the rent and household insurance. In the United States in 1970, renters paid a median of $89 a month for housing, but in Oregon the median rent was $86 a month. The median for household heads over 65 in Oregon was $83 a month. The 65 and over male household head paid a median rent of $81 a month, while the female household head paid a median rent of $107 a month (34:49).

A comparison between owning and renting costs cannot be made with the above expenses only because rentals may include utilities. Utilities include electricity, heating, garbage, water and sewer, television cable, and telephone. While single family rentals may not include any utilities, multiple family rentals may include some or all of the utility costs.

Utility costs represent a segment of public services which are regulated by government controls rather than charged according to supply and demand. Necessary cost increases are allowed only when the utility companies can prove reason for the cost changes. In 1970, Oregon's electricity rate increases ranged from 5.5 percent to 14.7 percent (30:6). In 1972 these rates increased another 5.5 percent (31:3). The gas companies rates for 1970 increased from ten to 12 percent in Oregon. The telephone rates in 1970 increased three percent.

Other expenses that are related to housing costs are house cleaning and yard work. Many elderly people must hire these jobs done for them.

Property Tax

Homeowners and Renters Property Tax Refund

The Oregon House Bill 3248, Homeowners and Renters Property Tax Refund, was passed in 1973. This law provides for tax relief in the form of a refund or credit for state income tax payments based on household income (35). To apply for the tax refund the occupant of the property must file with the Oregon State Income Tax Office in Salem. Homeowners use property tax statements to apply for the refund, while renters must obtain a rent certificate from the landlord or provide proof of rent actually paid during the calendar year on the dwelling unit. Refunds for both property tax and rent are sent by the Oregon State Tax Office. People filing state income tax returns can use the property refunds as a credit on their state income taxes.

Property tax refund limitations were listed on the individual income tax forms for 1973. The most an owner could receive was $490 and the most a renter could receive was $245. No refunds were provided for household heads with more than $15,000 income (35:15).

Senior citizens were offered a short form to apply for refunds if their income was less than $5,000. However, people 65 and over who pay more than $200 property tax on their home or more than $50 per month rent can receive a larger refund by completing the longer form.

Veteran's Property Tax Exemption

Any veteran who has a 40 percent disability or a veteran's widow may file for the Veteran's Property Tax Exemption with the county assessor by April 1 of each year. A veteran's widow or a disabled veteran is exempt from taxation on the first $7,500 of the true cash value of the house or mobile home on which he or she occupies. For example, if the property was appraised at $17,500 for the true cash value, the disabled veteran or a veteran's widow pays a property tax on $10,000 for the $7,500 is exempt from taxation (33:4).

Deferral of Residential Ad Valorem Taxes

While not a tax relief, the Deferral of Residential Ad Valorem Taxes is available to the elderly. Taxes are deferred until 90 days after the property changes hands. The rate of interest on the deferred taxes is six percent per annum for each year the deferral is used. The deferred property tax and interest are a lien against the property.

The Deferral of Residential Ad Valorem Taxes must be filed with the county assessor and the State Treasurer before April 1 of each year. If a husband and wife apply together for the deferral and the husband dies, the wife can apply for the deferral in her name and continue to live on the property until her death (32:4).

III. METHODOLOGY

This study examined the expenditures for owning and renting housing of people age 65 and over. This chapter describes the selection of the sample, the development of the interview schedule, and the collection and analysis of the data.

Selection of the Sample

Household heads who were retired in Corvallis, Oregon, were selected as the population to study. Their pattern of living was expected to reflect the general population of age 65 and over household heads living within a heterogeneous community.

A list of 1,473 retired persons living in the Corvallis area was obtained from the two 1972-1973 Corvallis city directories (25, 26). The 60 household heads selected met the following criteria: (1) were listed as retired in a Corvallis city directory, (2) were age 65 or older, (3) were living independently in the community and were household heads, and (4) were willing to cooperate in the study. Thirty were to be renters and 30 were to be homeowners.

To select the sample of 60, numbers one through 1,473 were fed into the computer and 150 numbers were selected for the random sample. The numbers were matched to the name of the household head that had been assigned the number and the list of names was arranged in the order of drawing.

A letter (Appendix A) was mailed to the household heads asking them to participate in the study and to tell them the author would call to arrange an interview if they were willing to participate in the study. The letters were mailed in small numbers to permit the author to call shortly after the letter was received and to avoid mailing more letters than were needed. If the household heads had no telephone listed, the author visited them to arrange an interview. The interviews with the household heads without telephones were granted at the time the author visited their homes to arrange for an interview.

A total of 125 letters were mailed to obtain the 60 interviews included in the study. Among the first group of interviews there were more homeowners than renters. In order to obtain 30 owners and 30 renters the last group of letters was mailed to people whose address indicated they could be renters. After the last group of letters was mailed, the remainder of the sample was asked during the telephone call to arrange the interview if they were owners or renters. Of the 125 letters mailed to household heads, 64 were interviewed, but four refused to give all the necessary information and their interview schedules were discarded. Of the 61 who did not participate, 15 had moved, 12 refused to participate, 19 were unable to participate because of health reasons, six did not meet the age or household heads criteria, and nine were excluded because the owners' sample had been completed.

Development of the Interview Schedule

The interview schedule (Appendix B) was developed to collect the data for the sample. The data was divided into three parts: demographic characteristics, housing data, and tax relief and tax deferral. Demographic data on the household heads included age, marital status, education, health, income, length of retirement, and distance from their nearest relative.

Housing data was divided into four categories: (1) general housing information, (2) housing expenses, (3) operating expenses, and (4) household service expenses. General household information included age and size of the home, length of residence, and the condition of the house. Housing expenses for owners included mortgage payment, taxes, housing insurance, and maintenance and repair. For renters, housing expenses included rent payments and household furnishings insurance. Operating cost for both owners and renters included electricity, gas or oil, water and sewer, garbage collection, television cable, and telephone. Household services included additional expenses for house cleaning and yard care. Questions on tax relief included the type of tax relief or tax deferment used and the amount of taxes refunded or exempted.

The interview schedule was pretested with five people who were not eligible to be in the sample because they lived outside the Corvallis area or because the household head was under 65 years old. Included in the pretest were owners, renters, couples, and widows. The pretest helped the author to clarify questions and make them easier to understand.

Faculty from the Home Management Department in the School of Home Economics, from the Statistics Department in the College of Science, from the Economics Department in the College of Liberal Arts, and from the School of Business and Technology advised the author on the development of the interview schedule.

Collection of the Data

The author had planned to send the letter explaining the study in brief and then call by telephone later to make an appointment for completion of the interview schedule. However, in most instances when the household heads received the telephone call they wanted the author to come the same day to complete the interview schedule.

Interviewing of the 60 household heads who cooperated in the study was completed between March 26, 1974, and April 19, 1974. Interestingly, those interviews occurred Monday through Thursday and between ten in the morning and seven in the evening. The interviews ranged from ten minutes to 90 minutes with a median of 15 minutes and a mean of 20 minutes. The last part of March and the first part of April proved to be a good time to collect the data related to income and property tax relief or tax deferment because federal and state income tax forms had just been completed. These forms were used as references by some of the household heads. Many had made a detailed list of their housing expenses for 1973 and had the information ready for use when the author arrived. The ones who did not refer to written records had paid their expenses long enough to be aware of how their income was distributed.

The author interviewed 60 household heads and recorded their oral answers on the interview schedule. Couples were interviewed with both the husband and wife together unless one of them was in an institution. In these cases, the person living in the house was interviewed as the household head.

For questions related to income, health and health related problems the household heads were given cards with lists of answers and asked to select the answers which best indicated their situation.

The condition of the house was judged after a visual inspection by the author and from the answers given by the household heads to questions about repairs and remodeling done in 1973 and needed in 1974. A house was considered in excellent condition if it did not need any repairs or painting. If the house needed minor repairs or painting costing less than $150 it was considered in good condition. A house needing major repairs costing more than $150, such as a new roof, outside painting, or a new heating system, was considered in fair condition. A house that could be sold only for the price of the land or could not be economically repaired or remodeled was considered in poor condition.

Data from the assessor's office was gathered by looking up the owners' name in the master file in the Benton County Court House records and then looking up the number it was billed to in the records to find the appraised property value. When the appraised property value was found, the author multiplied the value by six percent to compute the interest forgone.

Analysis of the Data

Descriptive statistics including means, medians, and percentages and four different statistical tests were used to analyze the data. The statistical tests used were the t-test, the chi-square test of independence, the Wilcoxin (Mann-Whitney) non-parametric test, and the Wilcoxin Rank Sum Test.

The t-test is used to compare differences of the independent samples drawn from a normal population. This test was used to compare the differences between the ages of the renters and owners household heads and to compare the difference in the dollar expenses of housing between owners and renters before interest forgone was added.

The chi-square test of independence was used to test the difference between what was expected to happen and what was observed. The chi-square test was used to compare the differences between the married status of renters and owners household heads.

Wilcoxin (Mann-Whitney) non-parametric test is used on populations which do not have a normal curve of distribution. This is a two sample t-test. The Wilcoxin test was used: (1) to compare the differences between the percentage of income spent on housing of renters and owners, (2) to test the difference between the use of property tax relief by renters and owners, (3) to test the difference in household income between widowed and married household heads, (4) to test the difference of the square footage in the housing between renters and owners, (5) to test the difference between the age of housing of renters and owners, and (6) to compare the difference in the dollar expenses of housing between owners and renters with interest forgone included.

The Wilcoxin Rank Sum Test is a non-parametric analog of the one sample t-test. It is used when the sample shows evidence that it is drawn from a non-normal population in which the curve does not follow a normal distribution. This test was used to compare the difference between the type of housing of the married and widowed household heads.

IV. FINDINGS

In this chapter the results of the study are discussed. It is divided into three sections: (1) characteristics of the sample, (2) housing characteristics and expenditures, and (3) property tax relief.

Characteristics of the Sample

Discussion on the characteristics of the sample include age, marital status, distance to relatives, perceived health status, educational level, number of years retired, and income of the household heads.

Age of Household Heads

Table IV-1 gives the ages of the 60 household heads by age groups and type of home ownership. The ages of the household heads

Table IV-1. Age groups of the 60 household heads by type of home ownership.

Age Groups	Number Renters	Owners	Total
65-69	2	6	8
70-74	2	9	11
75-79	10	7	17
80-84	12	5	17
Over 85	4	3	7
Total	30	30	60

Significant at the .05 level.

ranged from 65 to 91 years old with a mean and a median age of 77 years. The renters were older than the owners. The renters ages ranged from 68 to 91 years old with a mean of 77 and a median of 79 years. The owners ages ranged from 65 to 89 years old with a mean of 75 and median of 74 years. Fifteen of the 30 owners were under age 75, but only four of the 30 renters were under age 75. Using the t-test the difference between the age of the renters and owners was significant at the .05 level.

The sex of the 60 household heads by age group and type of ownership is shown in Table IV-2. There were 34 female and 26

Table IV-2. Sex of 60 household heads by age group and type of home ownership.

	Number				
	Renters		Owners		Total
Age Groups	Women	Men	Women	Men	
65-69	1	1	2	4	8
70-74	0	2	3	6	11
75-79	10	0	3	4	17
80-84	10	2	1	4	17
Over 85	0	2	2	1	7
Total	23	7	11	19	60

Significant at the .05 level.

male household heads. Twenty-three of the 34 female household heads were renters, but only seven of the 26 male household heads were renters. Eleven women and 19 men were homeowners.

Marital Status

Table IV-3 gives the marital status of the 60 household heads. Nineteen of the 30 homeowners were married and all but one married homeowner was living with her spouse. The married person living alone had a spouse who was institutionalized for health reasons. However, only four of the 30 renters were married and living with their spouses. Interestingly, only eight of the homeowners were widowed, but 22 of the 30 renters were widowed. The difference in type of home ownership between married and widowed household heads was significant at the .01 level.

Table IV-3. Marital status of the 60 household heads

Marital Status	Number		Total
	Renters	Owners	
Married	4	19	23
Widowed	22	8	30
Single	3	2	5
Divorced	1	1	2
Total	30	30	60

Significant at the .01 level.

Distance to Relatives

The distance the 60 household heads lived from any relatives ranged from one-tenth of a mile to 1,030 miles. The mean was 200 and the median was 15 miles. The renters lived closer to a relative than the owners. The distance the 30 renters lived from any relative ranged from one-tenth of a mile to 700 miles with a mean of 54 miles and a median of two miles. The distance the 30 owners lived from any relative ranged from one-tenth of a mile to 1,030 miles with a mean of 144 and a median of 25 miles.

Twenty-one of the 30 renters and 15 of the owners lived less than 30 miles from a relative. Six of the 30 renters and five of the 30 owners lived between 45 and 99 miles from a relative. Two of the 30 renters and seven of the owners lived between 100 to 300 miles from a relative. Only one of the 30 renters and three of the 30 owners lived between 500 to 1,030 miles from a relative.

Perceived Health Status

Table IV-4 gives the perceived health status of the 60 household heads. Forty-two, or 70 percent, of the 60 household heads listed their health as either good or excellent. Twenty of the 26 men perceived their health as good or excellent and 22 of the 34 women perceived their health as good or excellent. More women than men perceived their health as fair to poor.

Table IV-4. Perceived health of the 60 household heads.

Perceived Health	Renters		Owners		Total
	Women	Men	Women	Men	
	Number				
Excellent	5	2	2	7	16
Good	10	3	5	8	26
Fair	6	2	2	4	14
Poor	2	0	2	0	4
Total	23	7	11	19	60

Table IV-5 shows the perceived health of the 60 household heads by the number of conditions reported. No chronic conditions were reported by 29 of the 60 household heads. One chronic condition was reported by 17 household heads and two or more chronic conditions were reported by 14 household heads.

Table IV-5. Perceived health reported by 60 household heads by number of chronic conditions.

Number of Chronic Conditions Reported	Number								Total
	Excellent		Good		Fair		Poor		
	R[a]	0[a]	R	0	R	0	R	0	
0	6	10	7	6					29
1			6	2	5	2	1	1	17
2			1	3	2	4			10
3			1	1					2
4								1	1
5							1		1
Total	6	10	15	12	7	6	2	2	60

R[a] Renters O[a] Owners

Table IV-6 shows the perceived health of 31 household heads who reported conditions limiting activity. Arthritis and heart disease were the two most often reported chronic conditions. Problems of seeing and hearing were only considered a problem by 11 household heads. Other conditions reported included foot, knee, back, and vein difficulties. Two household heads who had been in car accidents had limited ability walking. One household head reported a loss of equilibrium. Some reporting their health as fair only listed one health problem, but their answers may have been limited by only having the seven most common health problems of the elderly listed on the card.

Table IV-6. Health status of the 31 household heads by chronic conditions.

Condition	Number			
	Good	Fair	Poor	Total
Impaired sight	4	2		6
Impaired hearing	4	1		5
Arthritis	5	3	2	10
Heart disease	4	3	3	10
Cancer	1		1	2
Emphysema	1		1	2
Stroke		1	1	2
Hypertension	1	1		2
Depression		1		1
Weekend lungs from pleurisy pneumonia		1		1
Diabetes	1			1
Goiter			1	1
Other conditions	4	4	1	9

Education

Table IV-7 shows the educational level of the 60 household heads by sex and ownership. The educational level of the 60 household heads ranged from the third grade to doctoral degree with a mean and a median of 14 years. Twenty-four or 40 percent had completed between three to 12 years of schooling, 36 or 60 percent had completed one or more years of college, and 11 or 18 percent had more than 17

Table IV-7. Educational level of the 60 household heads by home ownership.

Years of Education	Number				Total
	Renters		Owners		
	Women	Men	Women	Men	
1- 8	1	2	3	5	11
9-12	9	0	4	0	13
13-16	9	3	3	10	25
17-19	3	0	0	0	3
19+	1	2	1	4	8
Total	23	7	11	19	60

years of schooling. Forty percent of the renters and owners had between a third grade and twelfth grade education and 60 percent of the renters and owners had completed one or more years of college.

Twenty percent of the renters and 17 percent of the owners had 17 years or more education.

Number of Years Retired

Table IV-8 gives data on the number of years the household heads have been retired. The years retired are computed from the last date the household head retired from the labor force. This table shows the household heads have been out of the labor force from less than a year to over 20 years with a mean of ten years.

Table IV-8. Number of years the 60 household heads have been retired.

No. of Yrs. Retired	Number		Total
	Renters	Owners	
0	8	1	9
1- 4	3	9	12
5- 9	8	9	17
10-14	6	6	12
15-19	3	2	5
20+	2	3	5
Total	30	30	60

While all the household heads were collecting retirement income, seven women had been housewives and did not consider themselves retired. Two people were still writing part-time. One writes text books and the other writes children's stories. Seven people had retired twice. In their second occupation two men were professional consultants in their fields. Three men had retired from the military service and had retired again after teaching at a university. One tradesman returned to work part-time at his former trade. Only one woman had retired twice. She had also returned to her former occupation as a bank employee. One man had retired three times: once from civil engineering, once from cattle ranching and once from real estate investing.

There was an average of eight years difference between the ages of the people who retired only once and those who retired twice. The average age of those who retired once was 65 years and the average age of those who retired twice was 72 years at retirement.

Income

The income level of the 60 household heads ranged from $620 to over $15,000 a year with a mean income of $6,227 and median income of $4,500 a year (Table IV-9). The 30 renters' income ranged from $620 to $15,000 with a mean income of $4,587. The 30 owners' income ranged from $1,500 to over $15,000 with a mean of $8,912.

Table IV-9. Income of 60 household heads according to ownership.

Dollar Income	Number Renters Women	Men	Owners Women	Men	Total
Under $3,000	10	2	4	0	16
3,000-6,999	11	0	5	7	23
7,000-9,999	2	3	1	4	10
10,000 and over	0	2	1	8	11
Total	23	7	11	19	60

Twenty-three of the 30 renters and 11 of the 30 owners were women household heads. Of the women, 41 percent had incomes under $3,000, while 48 percent had incomes between $3,000 and $6,999, and only 11 percent had incomes above $7,000. Sixty-five percent of the men household heads had incomes above $7,000. Only one woman had an income above $15,000 and this was because the family farm had been sold and the money had been divided among the heirs during 1973. Nine men had incomes of $15,000 and over and their retirement income can be expected to continue at that level for some time. The household heads with incomes above $7,000 were either business or professional people or their widows.

There were more one family households showing less income than $7,000 than two person households (Table IV-10). The difference in

Table IV-10. Income of one and two person households.

Dollar Income	Number		Total
	One Person	Two Person	
Under $3,000	15	1	16
$3,000-6,999	15	10	25
7,000-9,999	5	4	9
10,000 and over	1	9	10
Total	36	24	60

Significant at the .01 level.

this study between the incomes of one and two person households was significant at the .01 level.

Housing Characteristics

The housing characteristics include the length of time the household heads have lived in their present housing, the age of the house, the size of the house, and the condition of the house. This section concludes with renters' and owners' housing expenses, operating expenses, other expenses, and total housing expenses.

Length of Time in Housing

The 60 household heads have lived in their present housing from one to 66 years with a mean of 17 and median of 11 years. The 30 renters have lived in their present housing from one to 66 years with a mean of ten and a median of five years. The 30 owners have lived in their present housing from two to 63 years with a mean and median of 24 years.

Twelve owners and two renters have lived in their present housing for more than 30 years. Five renters were living in low income housing. Five of the renters indicated they had selected their housing for safety reasons. Three of these had chosen to live upstairs because they felt safer and the other two chose units near the back of the property.

Age of the Housing

The 60 household heads lived in houses that ranged from one to 102 years old with a mean of 33 years and a median of 19 years. The age of the housing for the 30 renters ranged from one to 102 years with a mean of 26 years and a median of 14 years. However, the housing for the 30 owners ranged from nine to 85 years with a mean of 39 years and a median of 33 years (Table IV-11).

Seven renters and eight of the owners had lived in their present housing since it was new. Forty percent of the renters and seven percent of the owners lived in housing that was less than ten years old. The difference in age of the housing between renters and owners was significant at the .01 level.

Table IV-11. Age of the 60 houses according to type of home ownership.

Age of Houses in Years	Number		Total
	Renters	Owners	
1-19	21	9	30
20-39	2	7	9
40-59	1	7	8
60-79	4	6	10
Over 80	2	1	3
Total	30	30	60

Significant at the .01 level.

Size of Housing

The size of housing includes the square footage and the number of rooms in the units. The square footage of the 60 houses ranged from 350 to 4,000 with a mean of 1,291 and a median of 900 square feet. Rental units ranged from 350 to 2,000 square feet with a mean of 781 and a median of 600 square feet. The owners units ranged from 400 to 4,000 square feet with a mean of 1,639 and median of 1,300 square feet.

Table IV-12 shows the square footage of the housing by ownership and marital status. Twenty-seven percent of the renters and four percent of the owners had less than 500 square feet in their

Table IV-12. Square footage of the housing by type of ownership and marital status.

Square Footage in Homes	Number: Renters Single	Renters Married	Owners Single	Owners Married	Total
0 to 500	8	0	1	0	9
501 to 1000	12	4	5	5	26
1001 to 1500	3	0	4	3	10
1501 to 2000	3	0	0	2	5
2001 to 2500	0	0	0	5	5
Over 2500	0	0	1	4	5
Total	26	4	11	19	60

housing. Fifty-three percent of the renters and 33 percent of the owners had between 501 to 1,000 square feet in their housing. Ten percent of the renters and 40 percent of the owners had over 1,501 square feet in their housing. Forty-three percent of the household heads lived in housing with 501 to 1,000 square feet. Only ten percent of the renters had housing with more than 1,500 square feet.

The number of rooms in the 60 houses ranged from two to nine rooms with a mean of five rooms and a median of four rooms. The rental units had from two to nine rooms with a mean and a median of four rooms. The owners' units had from three to eight rooms with a mean and a median of six rooms. The mean number of rooms per person was three for the renters and four for the homeowners.

Condition of Housing

Table IV-13 shows the condition of the housing by type of ownership for the 60 household heads. The author used visual inspection to assess the condition of the housing. There was little difference in the condition of the housing for the renters and owners. Forty-seven of the 60 household heads lived in houses which were in excellent to good condition.

Table IV-13. Condition of the 60 houses by type of ownership.

Condition	Number		Total
	Renters	Owners	
Excellent	11	9	20
Good	15	12	27
Fair	3	8	11
Poor	1	1	2
Total	30	30	60

Housing Expenditures

The mean housing expenditures are shown for the 60 household heads, by the number of household heads who had the housing expense and by income groupings.

Table IV-14 gives the total dollar expenditures for the 60 household heads before the property tax refund was deducted from taxes for owners and from rent for renters.

The annual rent payments ranged from \$366 to \$3, 060 with a mean of \$1, 816 and a median of \$1, 237. The total housing expenses ranged from \$654 to \$3, 350 with a mean of \$2, 142 and a median of \$2, 593 for the renters, before property tax refund was deducted from the renters taxes.

Before the use of property tax refund, the annual property tax for owner ranged from \$172 to \$1, 500 with a mean of \$543 and a median of \$340. The total housing expenses ranged from \$1, 028 to \$4, 858 with a mean of \$2, 492 and a median of \$2, 301 for the owners before the property tax refund was deducted from the owners' property taxes. The owners' housing expenses were \$350 more than the renters' for the year before the property tax refund was deducted for taxes for owners and rent on renters.

Thirteen percent of the renters' housing expenses went for utilities. However 24 percent of the owners' housing expenses went for utilities. An explanation for the differences in amount spent for utilities is that all but one renter had one or more utilities included in their rent. It is difficult to determine how much renters spend for utilities when rent includes part or most of these expenses.

Table IV-14. Mean housing expenses before use of property tax refund.

Type of Expenses	Number Renter	Number Owner	Percent Renter	Percent Owner
Housing Expense				
Rent before tax relief	$1,816		85.0	
Mortgage		$ 87		3.5
Taxes before tax relief		543		21.8
Insurance	18	81	0.9	3.3
Maintenance and Repair		140		5.6
Interest Forgone		1,007		40.4
Total	1,834	1,858	85.9	74.6
Operating Expenses				
Electricity	126	178	6.0	7.1
Gas/Oil	44	173	2.0	6.9
Garbage Collection	4	29	0.2	1.2
Water/Sewer	2	73	0.1	2.9
Television Cable	14	34	0.7	1.4
Telephone	86	113	4.0	4.5
Total	276	600	13.0	24.0
Other Expenses				
House Cleaning	30	14	1.0	0.6
Yard Work	2	20	0.1	0.8
Total	$ 32	34	1.1	1.4
TOTAL EXPENSES	$2,142	2,492	100.0	100.0

Renters' Housing Expenses

Rent payments ranged from $366 to $3, 060 a year, with a mean of $1, 659 and a median of $1, 237 after tax refund (Table IV-15). One household head managed a unit in exchange for rent payments. Five of the renters lived in low-income housing.

Fifteen of the 30 renters had household insurance on their possessions. The insurance cost ranged from $11 to $100 a year on household possessions. The median yearly payment on household insurance was $30 and the mean was $34 for the 15 renters who used the insurance. The mean expense for insurance for the 30 renters was $18 and the median was $25 per year (Table IV-15).

Homeowners' Housing Expenses

The housing expenses for the 30 homeowners included the mortgage payments, taxes, housing insurance, maintenance and repair, and interest forgone computed at six percent of the assessed property value.

Only three homeowners had mortgage payments which ranged from $792 to $960 a year, or $66 to $80 per month. The mean for the 30 owners was $87 (Table IV-15), and the median was $900 for the year. The total amount owed on the property ranged from $3, 000 to $7, 000 with a median of $5, 189.

Property taxes for 1973 ranged from no taxes to $1, 500 with a

Table IV-15. Mean housing expenses after tax refund.

Type of Expenses	RENTERS Mean Dollar n=30	RENTERS Percent of Housing Expense	RENTERS No. Reporting	RENTERS Mean Dollars of Those Reporting	RENTERS Percentage of Housing Expense of Those Reporting	OWNERS Mean Dollar n=30	OWNERS Percent of Housing Expense	OWNERS No. Reporting	OWNERS Mean Dollars of Those Reporting	OWNERS Percentage of Housing Expense of Those Reporting
Housing Expenses										
Rent	$1,659	83.9	29	$1,685	64					
Mortgage						$ 87	3.9	3	$ 883	26
Taxes						292	13.0	30	292	9
Insurance	18	.9	15	34	1	81	3.6	30	81	2
Maintenance and Repair						140	6.2	26	157	5
Interest Forgone						1,007	44.9	30	1,007	30
Total	$1,677	84.8				$1,607	71.6			
Operating Expenses										
Electricity	126	6.2	21	166	7	178	8.0	30	178	5
Gas/Oil	44	2.1	7	228	9	173	7.9	23	225	7
Garbage Collection	4	0.2	3	45	2	29	1.3	26	35	1
Water/Sewer	2	0.1	1	73	3	73	3.2	25	87	3
Television Cable	14	0.7	12	42	2	34	1.4	16	58	2
Telephone	86	4.3	27	107	5	113	5.1	29	117	4
Total	$ 276	13.6				$ 600	26.9			
Other Expenses										
House Cleaning	30	1.5	5	177	5	14	0.6	3	150	4
Yard Work	2	0.1	3	39	2	20	0.9	11	69	2
Total	$ 32	1.6				$ 34	1.5			
TOTAL EXPENSES	$1,985	100.0				$2,241	100.0			

Significant at the .01 level.

mean of $292 and a median of $340 for the year after tax refund (Table IV-15).

All of the owners carried housing insurance. Premiums ranged from $33 to $190 for the year 1973. The median insurance payment was $72 and the mean was $81 for the year (Table IV-15).

There were four of the 30 owners who did not plan for any maintenance and repairs and had not incurred any expenses for upkeep since they bought their homes. For those who reported maintenance and repair expenses for the year, the expense ranged from $25 to $600 a year. The median amount allowed for maintenance and repairs by the 30 owners was $75 and the mean was $140 for 1973 (Table IV-15).

The assessed property value as recorded in the county assessor's office for owners ranged from $5,000 to $39,470 with a mean of $14,241 and a median of $15,000. This was higher than the national property average of $12,000 for household heads 65 and over (24:5). It was also higher than the average property value of $12,240 in Oregon for household heads 65 and over (34:49). The property value of the 11 single household owners ranged from $5,000 to $27,070 with a mean of $12,980 and a median of $11,240. Interest forgone, considered a housing expense, was computed at six percent on the assessed value of the property and added to the housing expenses. The interest forgone ranged from $283 to $2,368 with a mean of $1,007 and a median of $900 for 1973 (Table IV-15).

<u>Renters' Operating Expenses</u>

Renters' operating expenses included electricity, gas, garbage, water and sewer, television cable, and telephone.

In all but one case, the 30 renters had some utilities furnished in their rent costs. Nine of the 30 renters had electricity furnished. Two renters had water only furnished, while 27 had water and garbage both included in their rent payments. Six had their gas furnished and nine had television cable included with their rent.

Nine of the renters had their electricity included in their rent cost. Of the 21 that did not have their electricity included in their rent, 18 heated with electricity. The yearly costs ranged from $60 to $372 with a median of $157 and mean of $126 for the 30 renters (Table IV-15).

Seven of the 30 rental units paid for their gas or oil heat. The yearly cost of gas or oil ranged from $84 to $660 with a median of $47 and a mean of $44 for the 30 household heads.

Only three of the 30 renters did not have the garbage collection included in their rent. Yearly garbage collection costs ranged from $22 to $60 with a median of $30 and a mean of $4 for the 30 renters.

One renter was responsible for the water and sewer payment. This renter lived in a single family dwelling and had to pay all the utilities for his house. The renter paid $73 for water in 1973.

Television cable was furnished for nine of the 30 rentals. Twelve of the renters paid for their television cable service and nine did not use the service. The cost for the television cable ranged from $24 to $72 a year with a median of $34 and a mean of $14 for the 30 renters.

The telephone is a necessity for many people over 65. There were 27 renters who had telephones and the cost ranged from $64 to $336 for the year. The median cost was $100 and the mean cost was $86 for the 30 renters for the year (Table IV-15).

Owners' Operating Expenses

The operating expenses for the 30 owners included electricity, gas or oil, garbage, water, television cable, and telephone.

All 30 of the owners had electricity. The yearly electric bill ranged from $84 to $492 with a median of $144 and a mean of $178.

Gas or oil ranged from $120 to $575 with a mean of $173 and a median of $189 for the 30 owners. For heating, 23 of the owners used gas or oil, six used electricity, and one used wood (Table IV-15).

Twenty-six of the owners had garbage collection service. The cost for this service ranged from $6 to $86 a year with a mean of $29 and median of $30 for the year. The four homeowners who did not use the garbage collection either buried their garbage or put it into a relative's garbage can. The owners who had a low garbage collection expense only had their garbage removed when their can became full.

All but five of the owners had city water and these five used well water. The yearly water bill ranged from $60 to $156 per year and the median was $72 and the mean was $73 for the 30 owners (Table IV-15).

The television cable service was used by 16 homeowners and it ranged in cost from $30 to $75 a year. The median was $30 and the mean was $34 for the 30 owners (Table IV-15).

Telephone expenditures were added to the operating costs for homeowners. Twenty-nine of the 30 homeowners had telephones and the cost ranged from $60 to $300 with a median of $88 and a mean of $113 for the 30 owners (Table IV-15).

Renters' Other Expenses

Other expenses for the renters included yard and house work. There were five renters who used help with their house work. The yearly cost ranged from $60 to $405 a year. The median was $81 and the mean was $30 for the 30 renters (Table IV-15).

Three of the renters hired some yard work. The cost per year ranged from $14 to $60 with a median of $30 and a mean of $2 for the 30 renters (Table IV-15).

Owners' Other Expenses

Other expenses included hiring help with the house and yard work. Only three homeowners had help with their house cleaning. The cost ranged from \$112 to \$252 for the year. The median yearly expense was \$216 and the mean was \$14 for the 30 homeowners (Table IV-15).

Eleven of the homeowners had help with their yard work. The yearly expense ranged from \$10 to \$260 with a median and a mean of \$20 for the 30 homeowners (Table IV-15).

The renters paid an average of 13 percent more than owners for housing expenses. But owners paid 13 percent more for household operating expenses. Yet other expenses for house and yard work were only one percent of the renters' and owners' housing expenses (Table IV-15).

Total Housing Expenses

For this study, total housing expenses were compared three different ways: (1) by comparing the dollar expense on housing between renters and owners, (2) by comparing the percentage of household income spent on housing between renters and owners, and (3) by comparing the cost per square foot between renters and owners.

The total dollar expenditure of renters and owners were computed by adding together all the housing expenses, operating expenses, and other expenses to get total housing expenses after property tax refund. Renters' housing costs ranged from $591 to $3, 350 with a mean of $1, 985 and a median of $2, 593. Owners' housing cost, including interest forgone, ranged from $928 to $4, 858 with a mean of $2, 241 and a median of $2, 301. There was a significant difference at the .01 level between housing cost of owners and renters.

The housing expenditures are shown for the household heads by income grouping (Table IV-16). Those with income under $5, 000 paid less on total housing expenses than those with income over $5, 000. However, those with less than $5, 000 spent a greater percent of their income on housing, 60 percent of the renters' income and 49 percent of the owners' income, than those with incomes over $5, 000. The renters and owners with incomes over $5, 000 spent 27 and 26 percent respectively of their income on housing.

The percentage of total household income spent on housing was computed for renters and owners. In 1973, the United States Department of Labor, Bureau of Labor Statistics (15) estimated that housing expenses took between 37 to 40 percent of the retired person's income (15:45). This sample of 60 household heads reported they spent from 12 to 140 percent of their income for housing expenses. The 30 renters reported they spent from 12 to 140 percent of their income on housing, with a mean of 44 percent. The 30 owners, with

Table IV-16. Mean housing expenses for the 60 household heads by income group and type of ownership after property tax refund.

Type of Expense	Income Under $5,000		Income Over $5,000		Income Under $5,000		Income Over $5,000	
	Renter	Owner	Renter	Owner	Renter	Owner	Renter	Owner
	Dollars		Dollars		Percent		Percent	
	n=22	n=10	n=8	n=20				
Housing Expense								
Rent	1,316		2,128		78.0		84.7	
Mortgage				132				5.1
Taxes		239		357		13.5		13.8
Insurance	18	79	17	91	1.0	4.4	0.6	3.5
Maintenance and Repair		112		149		6.3		5.8
Interest Forgone		739		1,198		41.5		46.4
Total	1,334	1,169	2,145	1,927	79.0	65.7	85.3	74.6
Operating Expenses								
Electricity	88	169	168	183	5.0	9.5	6.7	7.0
Gas/Oil	75	153	34	182	5.0	8.6	1.4	7.0
Garbage Collection	7	27	4	34	0.4	1.5	0.2	1.4
Water/Sewer	3	62		78	0.2	3.5		3.0
Television Cable	20	24	16	39	1.0	1.3	0.6	1.4
Telephone	88	107	124	116	5.0	6.0	5.0	4.5
Total	281	542	346	632	16.6	30.4	13.9	24.3
Other Expenses								
House Cleaning	66	32	18	13	4.0	1.8	0.7	0.5
Yard Work	3	38	2	16	0.4	2.1	0.1	0.6
Total	69	70	20	27	4.4	3.9	0.8	1.1
TOTAL EXPENSES	1,684	1,781	2,511	2,586	100.0	100.0	100.0	100.0
Mean Income	2,824	3,600	9,188	9,980				
Median Income	2,500	4,500	9,500	9,500				
Percentage of Income spent on housing	60	49	27	26				

interest forgone, reported they spent from 17 to 119 percent of their income for housing, with a mean of 37 percent. Fifteen of the 30 renters and 18 of the 30 owners spent less than 40 percent of their income on housing (Table IV-17). There was no significant difference between the percentage of income the renters or owners spent on housing using the Wilcoxin (Mann-Whitney) non-parametric test.

When interest forgone was not included as part of the total housing cost, there was a significant difference at the .01 level between the percentage of income the renters and owners paid for housing. Eleven of the owners spent over 15 percent of

Table IV-17. Percentage of income spent on housing.

Percent of Income Spent for Housing	Number Before Tax Refund		Number After Tax Refund	
	Renters	Owners	Renters	Owners
Under 20	3	4	3	8
20 - 39	12	11	12	10
40 - 59	7	12	11	10
60 - 79	6	2	2	1
Over 80	2	1	2	1
Total	30	30	30	30

their income on housing when interest forgone was not included. Fifteen of the owners spent between 15 to 30 percent of their income on housing. Four owners spent over 30 percent of their income on housing when interest forgone was not included.

Cost per square foot per year was used to determine the use cost of housing in relation to its size. The use cost per square foot for the year for the renters ranged from $0.22 to $5.00 with a mean of $2.24. The use cost per square foot for the owners ranged from $0.49 to $3.03 with a mean of $1.65. Table IV-18 shows the use cost per square foot by type of ownership and the percentage of income spent before and after tax refund on housing. Using the Wilcoxin test there was a significant diffference at the .05 level between the use cost per square footage of renters' and owners' housing.

Table IV-18. Use cost per square foot per year by type of ownership.

Cost per Square Foot in Dollars	Number Before Tax Refund		Number After Tax Refund	
	Renters	Owner	Renter	Owner
$ 0 - .99	5	3	5	4
1.00 - 1.99	8	17	11	18
2.00 - 2.99	9	7	6	8
3.00 - 3.99	5	3	5	1
4.00 and over	3	0	3	0
Total	30	30	30	30

Significant at .05 level.

Property Tax Relief and Deferment Use

This section contains information on the type of property tax relief used and the amount of property tax refund allowed the householder.

Type of Tax Relief Used

The renters were only eligible for the Homeowners and Renters Property Tax Refund. However, the owners were eligible for the Veteran's Tax Exemption, and/or the Homeowners and Renters Property Tax Refund, or the Deferral of Residential Ad Valorem Tax.

Twenty-six of the 29 renters who were eligible for property tax relief used it. Twenty-three of the 24 owners who were eligible for tax relief used one or two of the three types of property tax relief available to them. The Homeowners and Renters Property Tax Refund was used by 18 owners, the Veteran's Tax Exemption was used by two owners, and the Homeowners and Renters Property Tax Refund and the Veteran's Tax Exemption was used by three owners. The Deferral of Residential Ad Valorem Tax was not used by any homeowner in the study.

There was no significant difference between the number of renters and owners use of property tax relief. The Wilcoxin (Mann-Whitney) non-parametric test was used to test the significance between renters and owners use of property tax relief.

Amount of Tax Refund Received

The amount of refund the 30 renters received ranged from $50 to $200 with a mean of $157 and a median of $130. The amount of refund the 30 owners received ranged from $50 to $390 with a mean of $251 and a median of $200. Table IV-19 gives the dollar value of the tax relief for renters and owners.

Table IV-19. Dollar value of tax relief refunds by type of ownership.

Tax Relief in Dollars	Number		Total
	Renters	Owners	
Did not apply	3	7	10
$ 0 - 75	5	2	7
75 - 149	11	6	17
150 - 224	10	4	14
225 - 299	1	6	7
Over $300	0	5	5
Total	30	30	60

Rent was reduced an average of $157 by the use of Homeowners and Renters Property Tax Refund. The property owners tax was reduced an average of $251 by the use of Homeowners and Renters Property Tax Refund and/or the Veteran's Tax Exemption. The total housing expenses were reduced by nine percent for both renters and owners by the use of property tax relief (Table IV-20).

Table IV-20. The use of tax relief to reduce housing expenditures.

Description	Renters n=30	Owners n=30
Mean Rent Paid	$1,816	$
Mean Tax Paid		543
Mean Rent Refund	157	
Mean Tax Refund		251
	$1,659	$ 292
Total housing expenses before tax relief	$2,142	$2,492
Total housing expenses after tax relief	1,985	2,241
Percent housing expenditures reduced by tax relief	9	9

SUMMARY AND CONCLUSIONS

This chapter includes summary, discussion, conclusions, and suggestions for further research

Summary

The purpose of this study was to investigate differentials in cost of owning and renting housing for people 65 and over.

Sixty household heads, 30 renters and 30 owners, who met the following criteria were interviewed: were listed as retired in the Corvallis city directories, were 65 years or over, were living independently in the community, and were willing to cooperate in the study.

The age of the 60 household heads ranged from 65 to 91 with a mean and a median age of 77 years. The 30 renters' mean age was 77 years and the median was 79 years. The 30 owners' mean age was 75 years and the median was 74 years. Twenty-three of the 60 household heads were married, 30 were widowed, five were single, and two were divorced. Only four of the renters, and 19 of the owners were married.

Forty-two, or 70 percent, of the 60 household heads were in good to excellent health and the remaining 30 percent listed their health as poor to fair.

The mean and median years of school were 14 for the 60 household heads. The mean years the household heads had been retired from their last employment was ten years. Three men were still working part-time. The income of the 60 household heads ranged from $620 to over $15,000 a year with a mean income of $6,227 and a median of $4,500. The 30 renters' mean income was $4,587 and the 30 owners' mean income was $8,912.

The number of years the 60 household heads had lived in their present housing ranged from one to 66 years with a mean of 17 years. The 30 renters lived in their housing an average of ten years and the owners lived in their housing an average of 24 years. The age of the 60 houses ranged from one to 102 years old with a mean of 33 years. The mean age of the 30 rentals was 26 years and the mean age of the 30 owners' housing was 39 years.

Forty-seven of the 60 household heads lived in housing in good to excellent condition.

The square footage and the number of rooms per unit were considered in examining the size of the housing. The square footage of the 60 houses ranged from 350 to 4,000 with a mean of 1,291 and a median of 900 square feet. Rental units had a mean of 781 and a median of 600 square feet. Owners' units had a mean of 1,639 and a median of 1,300 square feet. The number of rooms ranged from two to nine with a mean of five rooms and a median of four rooms. The rental units had a mean and a median of four rooms, while the owners' units had a mean and a median of six rooms. The number of rooms per person was three for the renters and four for the house owners.

The mean total housing expenditures per annum for the 30 renters was $1,985. Of this amount $1,677 was payment for rent, $18 was payment for insurance, $126 was payment for electricity, $44 was payment for gas and oil, $4 was payment for garbage collection, $2 was payment for water and sewer, $14 was payment for television cable, $86 was payment for telephone, $30 was payment for house cleaning, and $2 was payment for yard work.

The mean total housing expenditures per annum for the 30 owners was $2,241. These dollars were spent as follows: $87 for mortgage payment, $292 for taxes, $81 for insurance, $140 for maintenance and repairs, $1,007 for interest forgone, $178 for electricity, $173 for gas or oil. $29 for garbage collection, $73 for water and sewer, $34 for television cable, $113 for telephone, $14 for house cleaning, and $20 for yard work.

Hypothesis 1. There is no difference in the average dollar expenditure of shelter for homeowners and renters.

When interest forgone was included as part of the owners' total housing expenditure, this hypothesis is rejected. There was a significant difference at .01 level between the housing expenditure of owners and renters. For renters the mean housing expenditures were $1,985 and for owners the mean housing expenditures were $2,241.

When interest forgone was not included as part of the owner's total housing expenditure, there was a significant difference at the .01 level between expenditure of owning and renting housing using the t-test. The mean housing cost for owners was $1,[illegible]34 when interest forgone was not included.

Hypothesis 2. There is no difference in the percentage of income spent for shelter between the elderly who rent and who own their housing.

This hypothesis was accepted. There was no significant difference using the Wilcoxin (Mann-Whitney) non-parametric test. Fifty percent of the renters and 60 percent of the owners spent less than 40 percent of their income on housing. The renters spent a mean of 44 percent of their income for housing. The owners spent a mean of 37 percent of their income for housing.

Hypothesis 3. There is no relationship between the size of the house and the expenditure of housing for the elderly.

This hypothesis was rejected at the .05 level of significance, using the Wilcoxin (Mann-Whitney) non-parametric test. The renters' use cost per square foot per year ranged from $0.22 to $5.00 with a mean of $2.24. However, the owners' use cost per square foot per year ranged from $0.49 to $3.03 with a mean of $1.65.

Hypothesis 4. There is no difference in the percentage of the elderly homeowners and renters who use property tax relief.

This hypothesis was accepted. There was no significant difference found when the Wilcoxin (Mann-Whitney) non-parametric test was used. Twenty-seven of the 30 renters and 23 of the 30 owners used some type of property tax relief. The mean dollar amount refunded was $157 for the renters and $251 for the owners. The total housing cost for both renters and owners was reduced by nine percent by use of property tax relief.

Discussion

Studies in the United States show that as people age, their chances for widowhood and living alone increase (12:43, 3:12, 50). However the men tend to be married throughout their life while the women tend to become widowed (50). This study of 60 household heads followed national trends. Of the 19 household heads between ages 65 to 75, 13 were married, one man was single, one woman was divorced and four women were widowed. Of the 41 household heads over age 75, 11 were married, one man and three women were single, one woman was divorced, and one man and 25 women were widowed. Of the 26 male household heads in this study 23 were married, two had never married and one was a widower. Of the 34 female household heads, 28 were widowed, three had never married, two were divorced; and one was married, but her husband had been in a veteran's hospital over two years.

Family plays an important role in the life of the elderly. An examination of the composition of the 60 household heads showed that 35 household heads lived alone, 23 lived with their spouses and two had children living with them. Research shows one-half of the elderly live within a 30 mile drive of a relative (12:164). Of the 60 household heads in this study, 36 lived within 30 miles of a relative. The owners lived further away from a relative than the renters. However the owners averaged $27 more a year on their telephone bills than renters. While the telephone expense is related to the number of telephone extensions and the number of people on the telephone line, it could also indicate increased spending for long distance calls to family members.

The 1970 census data for the United States showed that people age 65 and over had averaged completing 8.8 years of schooling (42:1-83). However the household heads in this study had completed an average of 14 years of schooling, five years more of education than the national level for their age group.

The 1970 mean income for people age 65 and over in the United States was $5,053 for couples and $1,951 for single individuals (8:7). In this study of 60 household heads 65 and over, the mean income was $9,317 for the 26 couples and $4,419 for the 34 household heads who lived alone. This income was higher by $4, 264 for couples and by $2, 468 for the household heads who lived alone than the national average. The higher education level of the household heads in this study may help explain their higher retirement income. For people 65 and over the household heads between 65 to 72 reported more income than those over age 72 (42:116). In this study of 60 household heads, those between ages 65 to 75 reported more income than those over age 75 (Appendix C). Of the 16 household heads with incomes under $3, 000, 12 were over age 75. However of the 11 household heads with incomes over $10, 000, six were under age 75.

Tissue reported that a self-rating health scale tended to rate the self-image of the person being interviewed rather than their actual health status (36:166). The household heads in this study used their own definitions of excellent, good, fair, and poor to rate their health. Some based their health rating on the presence or absence of a chronic health condition while others based their health ratings on a comparison of their health with others in their age bracket. In this study 42 of the 60 household heads listed their health as good or excellent. Of these 29 reported no chronic conditions. However 14 of those who listed their health as good reported one to three chronic conditions. Eighteen who reported fair or poor health listed one to five chronic conditions. Many of the people in the later group reported the same chronic conditions as did those who reported good health. The degree of limitation the chronic condition had on the household head's ability to perform the daily tasks could be one reason for the range in health rating. Also people react differently to health conditions and limitations are easier for some people to handle than others. Arthritis and heart disease were the two most frequently reported chronic conditions in this study.

One of the household heads interviewed was proud of the fact he had never had any health insurance and had never needed to use health insurance. Yet, 19 household heads contacted for this study could not be interviewed because they had health problems too serious to grant an interview. However, one woman who was bedfast and did not have a telephone permitted an interview when the author arrived at her door to ask for an appointment for an interview. People differ in their ability to handle new experiences when they are not in optimum health.

The household heads in this study may have been healthier than the average for their age group. Many times the activities the individual is involved in are related to his health condition. Eight of the household heads reported they had retired more than once from employment. Of these, three had retired in their 40s from the military service. After their second retirement in their 60s these men were active in volunteer services and community activities. Five household heads retired from their first employment in their 60s and then had returned to their occupations but on a limited basis. One man who retired the first time from civil engineering in his 60s, retired from ranching in his late 70s and retired a third time from real estate investing in his 80s. All these men who retired more than once were in good or excellent health. The women tended to be active in their church work, musical activities or apartment management. One woman was volunteering her time to write the Bible in Braille in the Nigerian language.

Two-thirds of the elderly in the United States own their own homes but only 20 percent of these have mortgage payment (24:5). In Hansen's 1969 Corvallis study of 102 couples, he found 89 percent of the couples owned their own homes; however, 21 percent of the homeowners were making mortgage payments (19:50). This study does not follow the national trend because 30 renters and 30 owners were selected for the interview to examine differentials in cost of owning and renting housing. Of the owners, only three or 10 percent made mortgage payments.

Two factors which seem to influence the choice to rent rather than to own housing were the age of the household head and the household size (4:271). This study supports the finding of others about these two factors. Twenty-two of the 30 homeowners were two person households while 25 of the 30 renters were one person households. The owners tended to be younger than the renters in this study. The owners averaged 75 years and the renters averaged 77 years of age.

One-third of the elderly have lived in their present housing 20 years or more (4:271). The 60 household heads in this study averaged 17 years in their present housing. However the renters average ten years and the owners averaged 24 years in their present housing. The average age of the renters' housing was 26 years while the average age of the owners' housing was 39 years. However, 12 of the renters and three of the owners lived in housing which was less than ten years old.

In 1969, the average size of the houses of the 102 couples in Hansen's Corvallis study was six rooms (19:50). The homeowners in this study averaged six rooms also. However the household heads who lived in rental units averaged four rooms per household.

The average property value of homes in the United States for people 65 years and over was $12,000 for couples and $10,000 for one person household heads (24:5). The property value in Oregon for people 65 and over averaged $12,240 for men and $11,240 for women (29:49). In this study the average value of the 30 homeowners' property was $20,327 for couples and $12,908 for household heads living alone.

In the United States, median rent per month for all age renters was $89. But in Oregon the median rent for all age renters was $86 per month. In Oregon the 65 and over male household head paid a median of $81 for his rent and the female household head paid a median of $107 for her rent per month (34:49). The rent paid by the household heads in this study ranged from $36 to $255 with a median of $103 and the average of $138 a month after tax refund.

One method of determining the difference in cost of renting or owning housing is to compare total housing expenses (16:18). The total housing expense per year was $1,985 for the renters. These total housing expenses included $1,677 for rent and insurance which was 85 percent of their housing dollar, $276 for utilities, which was 13 percent of their household dollars, and $32 for house and yard cleaning which was two percent of their housing dollar. The total housing expenses per year was $2,241 for the homeowners. These total housing expenses included $1,607 for mortgage, taxes, maintenance and repair, interest forgone and insurance which was 71 percent of their housing dollars, $600 for utilities which was 27 percent of their housing dollar, and $34 for house and yard cleaning which was two percent of their total housing dollar. The renters spent more of their housing dollars on rent and insurance than owners did for mortgage, taxes, insurance, maintenance and repair and interest forgone. But the owners spent more of their housing dollars on utilities than the renters. Part of the difference can be explained because the renters tended to have one or more utilities included in their rent costs. In this study, total housing expenses for owners was $256 more than the housing expenses for renters. Total housing expenses were statistically significantly different at the .01 level for owners and renters. The difference of $256 in housing expenses could be an inducement to become a renter, as an individual ages, becomes a one person household head and has less physical energy.

To compare the housing costs with income, the renters and owners were divided into two groups, those with incomes under $5, 000 and those with incomes over $5, 000. There were 22 renters and ten owners with incomes under $5, 000. The renters had an average income of $2, 824 and spent $1, 684 or 60 percent of that income on their housing. The owners had an average income of $3, 600 and spent $1, 781 or 49 percent of their income on housing. Eight renters and 20 owners had incomes over $5, 000. The renters had an average income of $9, 188 and spent $2, 511 or 27 percent of their income on housing. The owners had an average income of $9, 980 and spent $2, 586 or 26 percent of that income on housing. The owners reported a higher income than renters but both the renters and owners in the higher income level spent 27 and 26 percent respectively of their income on housing. As the older persons' income becomes less, a greater proportion of their income must be spent for housing.

Three household heads spent 90 percent or more of their expenses for housing. One renter spent 140 percent of her income on housing. Her income was $620 a year from public assistance but her housing expenditures were $900 a year. She had been hit by a car a few years ago and the insurance settlement was used for her living expenses. The other renter who spent 90 percent of her income on housing did not indicate how she paid her other living expenses. This woman quit school in the ninth grade to go to work and she had continued to work until she was 68 years old. At the time of the interview she was 83 years old. The owner who was spending 99 percent of her income on housing had become widowed during the year and her Social Security benefits had been reduced. Of course, interest forgone was not a cash expenses for her, and when it was omitted, her housing expenses were 61 percent of her cash income.

Calculating the cost per square foot per year is another way of determining the cost of housing. In this study the renters' housing unit size averaged 1,291 square feet and their yearly use cost per square foot was $2.24. The owners' housing size averaged 1,639 square feet and their yearly use cost per square foot was $1.65. The renters averaged smaller square footage per unit but had a higher annual use cost per square foot.

Property taxes can be a hardship on the individual with a fixed income (51:21). Oregon is one of the few states which has property tax relief for both the homeowner and renter. In this study, 29 of the renters and 24 of the owners were eligible for property tax relief. Of those eligible three of the renters and one of the owners did not apply for tax relief. Two of the four needed assistance filling out the tax forms and the other two felt applying for the property tax relief was too much trouble. One of the widows using Veteran's Property Tax Exemption also applied for the homeowners' and renters' tax relief after the author informed her in the interview that she was eligible for both types of tax relief.

While safety was not investigated, it was mentioned as a reason by the renters for choosing their housing. All of the renters interviewed in low income housing indicated they either lived at the back of the property or upstairs off the street level for safety reasons. The renters with higher income tended to live in housing with permanently locked front doors which required an answer through communication system to allow entrance into the apartment house.

Conclusion

Interest forgone may not always be considered as part of housing costs. When it is not considered, owning appears to be less expensive than renting. However, interest forgone is a hidden housing expense that needs to be considered when comparing costs between renting and owning housing. When it is considered there does not appear to be much difference in the total housing expenses for renters and owners.

Housing adjustments are made by the elderly as they age. Age, marital status, and income can influence the type of ownership considered by the 65 and over person. The women tended to be renters after age 72, while the men did not tend to become renters until after age 82. The single person tended to live in rented housing while the couples tended to live in mortgage-free housing. Two person households with male head reported more income than widowed one person households. Never married one person households who had worked all their adult life had more income than widows. Income may not be the deciding factor in choosing between renting and owning. Widowhood seems to be one of the factors which could account for a change in the type of ownership.

Surprisingly, the use of property tax relief reduced the total housing costs by nine percent for both the renters and owners.

Suggestions for Future Research

This study provides insight into the characteristics of the retired household heads living in one community. Their housing expenses were limited to one city in western Oregon. Conducted in another area, the study could reveal different results.

Repeating this study in other geographic areas, economic sectors, and ethnic backgrounds would produce more complete information about housing costs for the elderly household heads.

Housing changes were reported to be made between retirement and age 75. A study of the factors that influence the people of these ages to make a change in their housing would be of value.

While the sample was randomly selected from a list of retired household heads from city directories, the generation of an owner and renter list would be recommended for future research.

The household heads reporting income over $10,000 have retirement incomes above the national average for retired household heads. The retirement planning done by these household heads needs to be investigated to see how they differ from the household heads with retirement incomes under $3,000.

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APPENDICES

APPENDIX A

Letter

School of Home Economics
OREGON STATE UNIVERSITY
Corvallis, Oregon 97331

Dear

I am a graduate student at Oregon State University working towards a master's degree in family economics. As a gerontology trainee studying the retirement stage of the life cycle, I wondered, and others have asked, whether a person would be better off owning a house or better off renting. I could not find the answer, and therefore decided this would be a good question for me to investigate. Perhaps you too have wondered which of the two choices is better economically. If you will share your experience with me along with the other persons asked to participate in this study, we can collectively come up with an answer.

You have been selected as one of the retired persons in the Corvallis area to be asked to participate in this study. I will call you by telephone within the next week to see if you are willing and, if you are, to arrange a time to talk with you.

I am interested in asking questions about housing expenses. Depending on whether you own or rent they will include: mortgage payments, taxes, maintenance and repair, rent, insurance, fuel and utilities.

All information received in this interview will be confidential and will be analyzed collectively, not individually. Your name will never be identified with any information or appear on the interview schedule.

Your help is requested and your cooperation will be greatly appreciated. I look forward to calling on you.

Sincerely yours,

/s/ Roberta V. Ebert

Roberta V. Ebert, Graduate Student

/s/ Martha A. Plonk

Martha A. Plonk, Major Professor

/s/ Betty E. Hawthorne

Betty E. Hawthorne, Acting Head
Home Management

APPENDIX B

Interview Schedule

INTERVIEW SCHEDULE

Number________________
Time________________

1. What is your marital status?
Single______ Married______ Widowed ______ Divorced______ Separated______

2. Do you live alone?____________ With spouse__________ With children__________
(list relationship)_____________________ With other relatives________________
(list relationship)____

3. Birthdate of the man of the house. Month______ Day______ Year_______
Birthdate of the woman of the house. Month______ Day ______ Year_______

4. What year did the man of the house retire?__________________________
What year did the woman of the house retire?________________________

5. Mark with a <u>M</u> for the man and <u>W</u> for the woman, the highest level of education completed.

1___2___3___4___5___6___7___8___9___10___11___12___
Vocational education_____ Some College_____ Bachelor degree_____
Master's degree_____ Doctor's degree_____

6. Do you have any physical problems that limit or make it difficult for you to do your home activities? Yes ____ No____ (Card A) Circle E G F P
List ____
(Card B) Show card if Yes

7. Do you own your own home? Yes ____ No ____
Do you rent your housing? Yes ____ No ____

8. How long have you lived in your present housing?______________________________

9. What is the square footage of your living area? ______________________________
If you do not know may I measure your house? Yes ____ No ____
Measurement ____

10. What is the distance you live from your nearest relative?______________________

11. How many rooms do you have in your house not counting the bath?
____

12. How old do you judge your house to be? _______________________________

13. Does your house need any repairs or remodeling in 1974? (list)__________________
____

14. If any repairs or remodeling was done in 1973, please list.____________________
____
Cost to you?____

OWNER'S SCHEDULE

1. Housing Expenses	Monthly	Yearly (amounts)	None (check)
Mortgage payments	$______	$______	______
Taxes	______	______	______
Housing insurance	______	______	______
Maintenance, Repair	______	______	______
Assessment on property	______	______	______
Total	$______	$______	

2. Operating Expenses	Monthly	Yearly (amounts)	None (check)
Electricity	$______	$______	______
Heat	______	______	______
Water/Sewer	______	______	______
Gas	______	______	______
Garbage Collection	______	______	______
Television Cable	______	______	______
Telephone	______	______	______
Other (list)______	______	______	______
______	______	______	______
Total	$______	$______	

3. Did you hire help in 1973 with:
House cleaning: Never______ Sometimes____ Cost_____per____
Yard work Never______ Sometimes____ Cost_____per____
Other (list)______________________ Cost_____per____
______________________ Cost_____per____
TOTAL $_____

. . . .

Not included on the interview. Property value of the house as registered in the Benton County Assessor's office as of 1973. __________
Interest forgone will be figured at six percent of the assessed value.

Assessed value $__________
6 %
Interest foregone $__________

RENTER'S SCHEDULE

1. How much do you pay for rent? Monthly__________ Yearly__________
   If none, explain____

2. If the following are not included in the rent, how much did you pay for them in 1973?

Operating Expenses	Monthly	Yearly (amounts)	Included in rent (check)
Insurance on possessions	$_________	$_________	_________
Electricity	_________	_________	_________
Heat	_________	_________	_________
Water/Sewer	_________	_________	_________
Gas	_________	_________	_________
Garbage collection	_________	_________	_________
Telephone	_________	_________	_________
Television cable	_________	_________	_________
Other (list)_________________	_________	_________	_________
_________________	_________	_________	_________
TOTAL	$_________	$_________	

3. Did you hire help in 1973 with:

House cleaning:	Never_____	Sometimes _____	Cost__________	per __________
Yard work	Never_____	Sometimes _____	Cost__________	per __________
Other (list)	____________________		Cost__________	per __________
	____________________		Cost__________	per __________
	____________________		Cost__________	per __________
TOTAL			$__________	

INCOME SCHEDULE

1. Did you or are you going to file a 1973 income tax return for Oregon?

   Yes________ No________

2. Will you please indicate which number best describes your total income in 1973?

   CARD C (Record number)____________

3. Did you or are you going to use some type of property tax relief for 1973?

   Veteran's Property Tax exemption ____________________

   Homeowners and Renters Property Tax refund____________________

   Deferral of Residential Ad Valorem taxes ____________________

4. If property tax relief was used, how much credit did you receive?

   ____

5. If you used Deferral of Residential Ad Valorem taxes, what factors led to your decision to use it?____

   ____

SELECTION CARDS

A. My health is

a. Excellent
b. Good
c. Fair
d. Poor

B. My health problem(s) is/are related to

a. Hearing
b. Sight
c. Arthritis
d. Diabetes
e. Heart
f. Emphysema
g. Cancer

C. My total gross income in 1973 was

a. Under \$2,000
b. \$2,000 to \$2,999
c. 3,000 to 3,999
d. 4,000 to 4,999
e. 5,000 to 5,999
f. 6,000 to 6,999
g. 7,000 to 7,999
h. 8,000 to 8,999
i. 9,000 to 9,999
j. 10,000 to 10,999
k. 11,000 to 11,999
l. 12,000 to 12,999
m. 13,000 to 13,999
n. 14,000 to 14,999
o. 15,000 and over

Appendix C

Table of Income by Age

No. of Household Heads by Age and Income

Income	No. of Household Heads by Age 65-69	70-74	75-79	Over 80
Renters				
Under $3,000	0	2	5	5
3,000-6,999	1	0	5	5
7,000-9,999	1	1	1	2
Over 10,000	0	0	0	2
Owners				
Under $3,000	2	0	1	1
3,000-6,999	3	2	3	4
7,000-9,999	0	2	2	1
Over 10,000	1	5	1	2
Total	8	12	18	22