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A STUDY OF THE ECONOMIC RELATIONSHIPS OF RETIRED PEOPLE AND A SMALL COMMUNITY

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The problem

In their appraisal of the state of the "Economics of Aging," Clark, Kreps and Spengler [1 p. 949] conclude, "There is a dearth of empirical results concerning the consequences of age structure changes on the productivity of an economy." Such changes can be manifested in many ways. In an economy operating with no slack in employment or human resources, or one in which tight supply situations exist in certain sectors, retirement of trained people can mean a reduction in production. In a highly technical society where sophisticated capital is teamed with sophisticated workers, retirement by certain people may be undesirable.

By and large these situations do not pertain to retirement in the United States. Most retirees can be easily replaced. But increased numbers of retirees create other kinds of economic problems and opportunities as well. Our understanding of these phenomena is also weak.

People retire under many different conditions and settle in many different kinds of environments. The affluent, and not so affluent, planned retirement communities represent one type. But probably the oldest type of retirement is that of the person who stays in or near his or her old community, living among younger people, many of whom are kinfolk or sons and daughters of friends of long standing. It is this type of retiree who is the subject of this paper.

In 1970 there were 2645 communities in the United States with population between 1000 and 20,000 where at least 15% of the population was over age 65. About half of these were located in the ten states of Texas, Oklahoma, Kansas, Nebraska, Minnesota, Wisconsin, Iowa, Illinois, Missouri, and Arkansas — the center of the nation.

Older people provide sources of basic income flows to generate economic activity, a reservoir of manpower with skills obtained from a lifetime of experience, and an economic and political entity whose influence must be considered by local decision makers in these communities.

Other Studies

A number of studies have been made which give some insights into the local role of the aged. Marilyn Moon [6] has attempted to establish a measure which will be useful in analyzing the effects of federal programs on individuals. Smeeding [7] has tried to extend this idea to a measurement of welfare itself. Hewitt, Staniforth and Christiansen [4] have evaluated the role of retirees on a selected (recreation oriented) area of Wisconsin.

Many books deal with retired persons from the point of view that they are non-productive, or at least declining in efficiency, and that this constitutes a problem. Steiner and Dorfman [8] assume further that they are out of the labor force entirely, hence only their demands for goods and services are of interest.

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None of these studies have really looked at the overall role retirees play in small communities.

This Study

This study was done with very limited resources. It is a pilot study of one small community in which 23% of the population is over 65 years of age. Because of limited resources, two separate surveys are utilized. One is taken from a large area survey made in 1975 involving people 60 years of age and up. It was made by sociologists. There were 137 interviews in the area covered by this study. The results are used to investigate general characteristics of the older people, and their perception of life in the community including ability of the local economy to service them.

The second survey was made in January 1978. It is in three parts: 1) a survey of local businesses and industries, which actually turned out to be a nearly complete census, 2) a sample of 30 households headed by persons under 60, and 3) a sample of 46 retirement households. The latter two concentrated on income and expenditure patterns and employment. The survey of retirement households was post-stratified to improve accuracy. Where comparison was possible with the 1975 study, the results were found to be closely similar.

Objectives

The major objective of this study is to investigate economic relationships between retired people and the local economy. In attaining this objective three sub-areas have been identified:

1. The ability of the local community to provide goods and services needed by the elderly.
2. The impact of retired people as sources of basic income and the multiplier effect of that income.
3. The extent to which retired people are still in the labor force, some of the impediments to labor force participation, and the degree to which retired people desire to actively participate in the labor force.

A general objective also is to determine the format for additional studies of this type.

Background

The community studied was contained in zip code 63382 which is in and immediately surrounding Vandalia, Missouri.¹ The Social Security Administration was paying retirement benefits in this area to 702 persons over 65 and 140 under 65 in 1978. Social Security payments amounted to \$2,394,500 for that year. We estimate that 80 other people were retired, but were not drawing social security.

The economy of this area is quite diversified. There are two large refractories, one large and one small clothing manufacturer, several small fabricators of other products, two fairly large regional wholesalers, four regional farm machinery dealers, a large furniture store drawing from 100 miles around, three large regional automobile sales firms, and agriculture based on soybeans and corn.

¹ As of 1978 this area was estimated to contain 3500 people, 3000 of whom lived inside the Vandalia city limits. This estimate is made on the basis of number of households estimated to be served by the local post office, plus population estimates prepared for the state by demographers in the UMC department of sociology.

The area is short on labor supplies and has been for many years. In 1978 less than half the industrial and trade workers lived in the zip code area. Commuting from other communities up to 75 miles away was common.

Very little secondary industry exists. Industries draw very few inputs from the area. The tertiary sector is also weak. Aside from the large exporting retailers, the offerings are limited and there is a heavy leakage to the county seat and to St. Louis for goods and services. Health services are particularly weak by conventional standards. Although there are several doctors (MD and DO), there is no clinic and no hospital. A small nursing home is available for chronically ill people. There is no public transportation and recreational facilities are very limited.

Provision of Goods and Services

The ability of the local community depends upon two things: 1) perceived needs of the elderly as seen by themselves and 2) needs as perceived by the suppliers. The latter include both private and public entities.

Decisions by suppliers in the private sector are supposed to be heavily influenced by price signals in the market place. Market failure occurs, however, when there is any form of monopoly power or where information flows are impeded. Since space conveys monopoly power, especially where demand is inelastic, and since information flows over space take time and resources, we would expect a certain amount of inefficiency in supplying needs of a specific segment of a population such as the elderly.

Decisions in the public sector are heavily influenced by pressure groups. Pressure groups arise when enough people become concerned about a situation and leadership develops to organize and bring pressure on the appropriate decision makers. In a community such as Vandalia, these decision makers are largely local officials and, for certain decisions such as tax increases and significant shifts in resource use, the voters. Inefficiencies may be expected here as well.

Some needs of the elderly retired persons can be provided by themselves acting alone or as a group.

Based upon replies made by the elderly on the two surveys, the analyst can classify their needs into eight groups: housing, including utilities; health services; food supplies; recreation; transportation; finance, including insurance; security, and other goods & services.

Housing

Results in both surveys indicate that about 90% of the elderly in this community own their own homes free of encumbrance. For those who must rent, the community has provided public housing. The latter is occupied largely by younger married couples. The opinion of the elderly is that the units were built in the "wrong part of town." This can be defined in several ways. Black residents of the community tend to live in another part of town. They are most likely to have lower incomes and to be renters, but prefer to live near one another. White renters may object to the location on other grounds such as the neighborhood.

Housing seems to be taken care of largely by the elderly themselves. Only nine percent actually rented in 1978. The remainder lived free in houses owned by themselves or others. In the 1975 study, 83% of respondents were completely satisfied with their housing arrangements, 12% were fairly well satisfied, and only 5% were dissatisfied.

Since housing and standard of living are closely related, adequacy of housing can also be judged from feelings of the elderly concerning their standard. Forty-three percent rated it good (above average), 51% average and 5% "difficult." Assuming the latter consisted mainly of those dissatisfied with housing arrangements, one would expect a more positive response to the public housing than was found. The survey did not probe into this matter.

The conclusion must be that housing needs of 95% of the retired persons are being adequately met and that insufficient data are available concerning public policy that might affect the remaining 5%.

Utilities in this community are largely furnished by the city. There were no statements made in the surveys about them.

Health Services

In the 1978 survey no one mentioned health as a problem. However, in 1975, medical care was reported as poor by 9%, fair by 34% and good by 44% (12% did not report). Ninety-one percent thought ambulance service was good, and 4% that it was fair. The manager of the nursing home pointed out that only about two-thirds of the occupants were over 60.

A conclusion might be that needs of the elderly are being taken care of surprisingly well, considering the services offered. This subject needs additional study.

Food Supplies

At the time of the 1978 survey there were six restaurants and fast food places in the community. In addition one pool hall sold sandwiches. No one cited the situation as bad or good. The survey team rated it mediocre. The 1975 survey of elderly people indicated they agreed with the team: 39% said it was good, 24% fair, 12% poor, and 23% declined to comment.

In 1978 there were seven grocery stores in the area. Only about 10% of the retired households indicated that they bought substantial amounts of groceries in other communities. Total expenditures on food and drink in the community consumed 15.9% of retired persons' total income. This can be compared with 11.9% for non-retirement households.

Recreation

About one-fourth of the retirees belonged to the older people's club in 1978. This organization owned a building in which various forms of recreation were held, including a weekly dinner. Both black and white retirees belong to it. Several churches also sponsored special events for older persons.

The only other forms of recreation were a bowling alley, an outdoor theater, a library, and two parks. In 1975, 35% said the movie situation was poor; 17% said it was fair; 16% said it was good; 32% declined to comment. Sixty-six percent rated the library good, 4% fair, 1% poor and 28% declined comment. The parks were considered good by 91%, fair by 4%, and were not rated by the remaining 4%.

The questions asked were not definitive enough to determine how adequate recreation was in the eyes of elderly people. There were no complaints about it in the 1978 survey. But that says little. Perhaps feeling would differ depending upon how important a particular form was to each individual. Those who declined comment may not be users of that particular form. This is another question that needs additional information.

Transportation

Although 83% of the elderly drove automobiles, 85% thought the transportation system was poor, 4% thought it was fair, 4% good and 7% did not know. These results from the 1975 survey were supported in complaints from 75% of those surveyed in 1978. When asked the areas needing improvement, transportation was mentioned far more often than any other item. There is a definite need in this community for a public transport system geared to the needs of retired people.

Finance

In 1975 a question was asked, "Do you have money left over at the end of each month?". Eighty percent of the respondents said "yes," 18% said "no," and 2% did not respond. Yet 64% said they were feeling the pinch of inflation. In 1978, retired persons surveyed spent 12.3% of their income on local financial services, about 90% of which was insurance premiums. All of the insurance agents in town sold hospitalization policies to retired persons. They are probably adequately, if not more than adequately, served in this area. Any subsequent studies of relationships of elderly to small communities should probe further into the matter of finances.

Security

When asked, in the 1975 survey, if they ever felt discriminated against because of age (or any other reason) 99% said "no." When asked if they could expect help if they had problems, 98% said "yes" and 81% said it would come from their own neighborhood.

With regard to fire protection, 75% said it was good, 12% fair, 10% poor and 11% did not respond. Police protection was rated good 53%, fair 24%, poor 5% and 18% no response.

In general, the feeling of retired persons in this community seems to be that they are quite secure. If this same feeling shows up in further studies, it would be well to contrast it with the feelings of security experienced by residents of other kinds of retirement environments.

Other Goods and Services

Replies to the 1975 survey indicate that the elderly perceive the local economy as a relatively good one in which to shop. In their ratings 52% said shopping facilities were good, 34% fair, 8% poor and 6% no response. In the 1978 survey the five clothing stores were cited several times as being good places to buy. There were a few complaints about prices charged in the one drug store and no positive comments in that area. No comments were made about automobile service stations and repair shops. In subsequent surveys more probing needs to be done in this area.

Summary

One of the major results of this pilot study is to identify area needing special attention in future studies of this kind. So far as the provision of goods and services is concerned, special attention should be paid to health services, recreation, finance, and other goods and services. Questions asked in the two surveys with regard to housing, food supplies, transportation and security seem to get adequate answers.

The general conclusion, based on the limited information in this study, is that the community does a surprisingly good job of meeting the perceived needs of the

elderly, considering the general condition of its tertiary sector. This means that the suppliers are doing some things right. The one glaring need for local input is in the area of transportation. Perhaps others would show up with a better planned and more extensive study.

RETIRED PERSONS AS A SOURCE OF BASIC INCOME

The Local Economic Base

Manufacturing — If classified by its largest industry sector, Vandalia is a manufacturing town. If classified by its other characteristics, it is a typical midwestern farm town. The manufacturing industries are of two kinds. The first is refractory brick and the second ready made clothing. There are two factories of each kind. The refractories hire largely men; the clothing factories hire largely women.

In the conventional way of looking at this situation one would conclude that the clothing factories developed to take advantage of a secondary labor market. To an extent, that may be true. But there is one complication, that is that about 70% of the labor force is imported and apparently always has been. Further, a significant portion commutes from distances of 50 to 75 miles.

The refractories were originally raw materials oriented to local clay deposits. But these deposits have played out and the clay is now imported as well.

A large proportion of pensions drawn by local retired persons are from employment at the refractories and clothing plants.

In 1978 the value of manufactured goods was \$35,880,000. Local expenditures were \$489,500 for auto and truck supplies and service, \$3,737,800 for transportation and communication, \$100,700 for local taxes, \$5,019,000 in local payrolls, \$13,600 for financial services, \$10,000 for utilities, and \$24,000 for non-auto repair services. Thus 26.2% of manufacturing gross was spent in the community and 73.8% was exogenous. This expenditure generated \$16,162,800 of additional local activity, for a direct and indirect effect of \$25,557,500 or a multiplier of 2.72, for the \$9,394,600 of local basic income.

The analyst prefers to calculate multipliers in this way in order to make a direct comparison to expenditures by retired persons from their retirement income.

Agriculture — It is estimated that the farms lying within zip code area 63382 produced \$19,087,500 of gross product in 1978. They spent \$1,259,600 with local farm supply stores, \$12,200 for auto supplies and service, \$175,200 with other retailers, \$311,200 for financial and insurance services, \$117,200 for transportation and communication, \$22,800 for utilities, \$554,000 for wholesale services, \$892,000 in local taxes, and \$1,882,700 for local payrolls and profit; a total of \$5,226,900. In other words 27.4% of their income entered the local economy and 72.6% was exogenous. This local expenditure generated \$10,061,600 of additional local activity of an overall effect of \$15,288,500, or a multiplier of 2.92.

Trade — In 1978, retail and wholesale trade sold \$18,984,400, or 58.2% of a total volume of \$32,609,900, outside of the zip code area. A large furniture store, some large farm implement dealers, some large automobile agencies and a large wholesaler were responsible for most of the export sales. The trade area served by those firms has a radius of about 50 miles. These firms also import a large proportion of their labor services. Endogenous payments per dollar of sales were only

24.7% so only \$4,689,200 of the export money actually entered the local economy, but it generated \$9,281,800 of additional local activity for an overall effect of \$13,980,000 or a multiplier of 2.87.

Other Endogenous Sectors — Other exogenous sales by generally endogenous sectors included transportation and communication \$1,126,500, personal and recreation services \$143,000 and some labor export of \$179,500 for a total of \$1,449,000. Their local expenditures from these sales amounted to \$374,100 or 25.8% of sales. This money generated \$740,600 of additional local activity for a total of \$1,114,700 or a multiplier of 2.98.

Retired People — In 1978 there were 922 people living in the Vandalia zip code area who were retired. Of these 842 were drawing social security payments and 80 were not. Social security payments amounted to \$2,394,500.² Results of the survey indicate this was 43.3% of income of those drawing social security, so total income of that group was \$5,529,700. People not drawing social security had estimated income of \$542,000. Total income for the retired group was \$6,071,700. Earnings accounted for 24% of this or \$1,464,500 leaving \$4,607,200 as a flow of basic income. Actual expenditures from this income in the local economy amounted to \$3,301,000 or 71.6% of the retirement income. These expenditures generated an additional \$3,042,800 of activity for an overall impact of \$6,343,800 or a multiplier of 1.92.

These results are shown in Table 1, and are broken down by economic sector and by kind of income generated. Total non-retirement personal income (including earned income of retired persons) amounted to \$18,085,100. Expenditures by retired persons generated \$1,568,400 or 8.7% of this. Total local government revenue amounted to \$1,968,200. Retired persons paid \$175,900 of this from retirement income and generated an additional \$68,500 for a total of \$244,400 or 12.4% of the total.

Retired Persons Compared to Other Sources

In a small town such as Vandalia, the only income that can be said to be truly basic is that which is actually spent there. In conventional input-output analysis it is common practice to include all exogenous income in basic income flows. For large regions, this is probably acceptable.

In order to make the other sources of basic income comparable with the inflow of retirement dollars, the direct effects have been reduced to actual local expenditures. The multipliers resulting are then comparable. They are those shown on the bottom line of Table 2.

In terms of multiplier effect per dollar spent, retired persons do not have as much impact as the other basic income sources. In terms of overall impact they are fourth in importance, behind manufacturing, agriculture, and trade.

When the direct and indirect effects are sub-classified, Manufacturing, Trade, Agriculture and Retired Persons rank in that order for generation of personal income. In terms of generation of local tax revenues the ranking is Agriculture, Manufacturing, Retired people, and Trade. For business generation we return to the original ranking: Manufacturing, Agriculture, Trade and Retired persons.

² Information furnished by James Lampe, Columbia Manager of U.S. Social Security.

TABLE 1
Impact of Retirement Income*
On the Vandalia Economy
(000)

<u>Sector Impacted</u>	<u>Purchases</u>	<u>Personal Income Generated</u>	<u>Local Revenue Generated</u>	<u>Business Income Generated</u>	<u>Total</u>
Agriculture	0	0	0	0	0
Manufacturing	0	0	0	0	0
Farm Supply Stores	171.5	39.2	1.2	205.2	245.6
Food and Drink	558.4	168.8	6.7	703.3	878.8
Retail Durables	129.0	50.9	1.8	171.6	224.3
Auto Sales and Service	554.0	114.4	4.0	657.9	776.3
Other Retail	224.7	53.8	2.2	274.6	330.6
Finance, Insurance and R. E.	432.3	482.8	15.2	873.9	1,371.9
Transportation and Commun.	124.0	12.2	4.3	134.3	150.8
Utilities	469.6	78.1	14.3	569.2	661.6
Wholesale	0	0	0	0	0
Health Service	378.2	357.8	11.7	674.9	1,044.4
Personal and Recreation Serv.	71.4	73.8	2.8	144.2	220.8
Repair Service	0	0	0	0	0
Other Service	12.0	12.3	.5	23.9	36.7
Local Government	175.9	124.3	179.7	98.0	402.0
Households	0	0	0	0	0
Total Direct and Indirect		1,568.4	244.4	4,531.0	6,343.8
Direct	(3,301.0)	0	175.9	3,125.1	3,301.0
Indirect		1,568.4	68.5	1,405.9	3,042.8

* Total Income Excluding Earnings. See Appendix Table 1 for explanation of sectors.

TABLE 2
Impact of All Basic Income Sources, Vandalia, Mo. 1978
(000)

	<u>Retired Persons</u>	<u>Manufacturing</u>	<u>Agriculture</u>	<u>Trade</u>	<u>Other</u>
Exogenous Income	4,607.2	\$35,880.0	\$19,087.5	\$18,984.4	\$1,449.0
Direct Local expenditures	3,301.0	9,394.6	5,226.9	4,869.2	374.1
Direct and indirect effect: Total	6,343.8	25,557.5	15,288.5	13,980.0	1,114.7
Personal Income	1,568.4	6,831.1	3,809.9	4,898.4	482.0
Gov't. Revenue	244.4	415.5	1,010.3	170.6	50.7
Business	4,531.0	18,310.9	10,468.3	8,911.0	582.0
Multipliers:					
% direct Exp.	1.92	2.72	2.92	2.87	2.98

The incomes of retired persons were not counted as part of the direct personal income flow because they are largely transfer payments and not compensation for use of local factors. The analyst considers this an important distinction, when using

their flows as basic income sources. They would not appear as part of the gross product of the area, although they certainly generate local income.

The importance of the ranking retired people have in regard to generation of local taxes lies with their possible claim on local services. The provision of local transportation would require some local resources, although most of the cost would be borne by grants from federal and state agencies. It would appear that local officials need to heed the pleadings of this important segment of their population for an old age transportation system.

Such a system might possibly be used by physically handicapped people and other indigenous persons as well. But it should be designed for the welfare of the elderly.

The distribution of expenditures by retired persons in the local economy was of most importance to the health industry (doctors) where 43.5% of all local sales were generated by retirement income. [Table 3] Between 25% and 30% of local sales of Food & Drink establishments, Other Retailers, Finance, Insurance & Real Estate, Utilities, and Personal & Recreation Service was also generated by that basic income source. Retired persons made heavy direct payments to four of the six sectors: Food & Drink, Finance, Insurance & Real Estate, Utilities, and Health Services. They also made fairly heavy direct payments to Other Retail Stores, but their direct payments to Personal & Recreation Service were low.

TABLE 3

Importance of Business Generated by Retired Persons Expenditures

Sectors Impacted	Direct and Indirect Effect (Thousand Dollars)	Proportion of Total Endogenous Sales
Manufacturing	2.7	8.8%
Farm Supply Stores	235.6	9.8%
Food and Drink	749.7	25.7%
Retail Durables	238.4	16.7%
Auto Sales and Service	891.7	17.7%
Other Retail	284.2	26.3%
Fin., Ins. and Real Est.	687.2	26.3%
Transportation and Commun.	185.2	4.1%
Utilities	626.9	29.0%
Wholesale	66.5	7.7%
Health	418.4	43.5%
Personal and Recreation Service	89.4	29.4%
Repair Service	34.9	12.6%
<u>Other Service</u>	20.2	20.2%

See Appendix Table 1 for details

Retail Durables, Auto Sales & Service, Miscellaneous Repair Services, and Other Service were dependent upon retired persons for the generation of between 10% and 25% of their local sales. Heavy direct payments were made to Auto Sales & Service. Manufacturing, Farm Supply Stores, Transportation & Communication, and Wholesaling depended upon them for less than 10% of their local business.

Retired persons spent a larger proportion of their income than did the non-retired in eight of fourteen local sectors: Farm Supply Stores, Food & Drink, Other Retail (largely clothing and drugs), Finance, Insurance & Real Estate (largely insurance), Transportation & Communication, Utilities, Health Service, and Personal & Recreation Service. They were lower for Manufacturing, Retail Durables, Auto Sales & Service, Repair Service, and Other Service.

TABLE 4
Proportion of Income Spent in Each Category
Comparing Retired and Non-Retired

<u>Sector</u>	<u>Retired</u>	<u>Non-Retired</u>
Agriculture	0	0
Manufacturing	0	.2%
Farm Supply Stores	4.9%	3.7%
Food and Drink	15.9%	11.9%
Retail Durables	3.7%	6.8%
Auto Sales and Service	15.8%	18.4%
Other Retail	6.4%	3.2%
Finance, Insurance and Real Estate	12.3%	4.7%
Transportation and Communication	3.5%	1.2%
Utilities	13.4%	6.0%
Wholesale	0	0
Health Service	10.8%	2.6%
Personal and Recreation Service	2.0%	1.2%
Repair Service	0	.3%
Other Service	.3%	.4%

While the overall impact of retired persons lags behind the three main sources of basic income flows, for certain segments of the local economy they are significant enough to warrant special attention.

Retired Persons as a Source of Labor

In recent years considerable attention has been given to changes in age distribution of the population. The implication is that as the proportion of elderly increases, more pressure is put on the younger and more productive segment of the labor force to furnish goods and services. The question naturally arises, "What role or roles can we expect retired persons to fill in future productive activities?"

General Characteristics of Retired Persons

Of the 137 persons interviewed in 1975, 53% were married, 44% widowed or divorced, and 3% had never married. Only 13 of them (10%) had more than high school education, 20% were high school graduates, and 70% did not graduate from high school.

Vandalia was home to most of them. 76% had lived in the same community over 20 years; 42% had lived in the same house 20 years. While 52% had lived in the same house less than 10 years, only 17% had lived in the community 10 years or less.

We can conclude, therefore, that most of these were or had been married. They are not particularly well educated. And they have never been very mobile.

Former Occupations and Current Employment

In their first occupations, 9% were professionals, 15% farmers, 4% managers and proprietors, 7% clerical, 6% craftsmen and foremen, 27% operatives, 9% unskilled laborers, 18% housewives, and 6% household workers. In terms of their last employment, managers and proprietors increased to 15% and craftsmen and foremen to 7%.

Thirty-four of the 137 (24%) were working at paid jobs at the time of the survey. Twenty-three percent worked irregular numbers of hours per week. Five percent worked less than 20 hours and 14% worked from 20 to 40 hours per week. In addition, 16 people were doing volunteer work for which they received no pay. The paid workers were working either in businesses or industry.

Despite rather low education levels these people had attained to respectable jobs, in general, during their lifetimes. After retirement, twenty-nine percent were working either for money or as volunteers.

Income

Twenty-three percent of the respondents had income from their own and 12% from spouse's salaries and wages. Eighty-nine percent were drawing social security. Thirty-eight percent had income from other pensions. Twenty-eight percent had rental income and 69% income from interest, insurance or dividends.

Income came from one to five different sources. Forty percent had income from three different sources, 33% from two, 13% from four, 9% from one and 4% from five. Nine percent regularly received monetary gifts from relatives.

Fifty-one percent reported that their major source of income was social security. For 10% it was wages and salaries, 7% other pensions, 7% rental income, 11% interest, insurance and dividends, 1% gifts, 6% two equal sources, and 7% did not respond. Thus, social security and other pensions were most important to 59%, wages and salaries to at least 10%, and investment income to at least 18%.

Income distribution was as follows:

<u>AMOUNT</u>	<u>NO.</u>	<u>PERCENT</u>
Less than \$2,000 per year	9	6.6
2,000-3,999	36	26.3
4,000-5,999	26	19.0
6,000-7,999	21	15.3
8,000-9,999	8	5.8
10,000-11,999	5	3.6
12,000-13,999	2	1.5
14,000-15,999	3	2.2
16,000 +	8	5.8
No response	19	13.9

Over half of the respondents (51.9%) received less than \$6,000 per year.

Labor Force Participation

Despite what would be considered by most people to be rather low incomes, only 30% held jobs, for which they were paid, in 1978. Most of these were part-time. The questionnaire used for business asked if there were impediments to the use of retired people in their businesses. Practically none were reported, except the desire of retired persons to work. Remember that Vandalia is a labor importer.

When retired persons were asked about their desire to work, all except those working said they could work if they wanted to but they did not want to. Some of them did volunteer work for which they received no pay, but they could be selective about participation in that.

There is no doubt that retired persons had marketable skills, but they were not the kind that can be marketed on a part-time basis. So those working part-time were working below their capabilities, at lower wages than they were capable of earning, and doing so in preference to working full time. Those few working full time were using their skills rather fully, and were considered retired only in the sense that they were also drawing a pension.

Further Research

In order to generalize for this important segment of the retired population, it will be necessary to study a fairly large number of communities. This has to be done with sufficient resources so that an adequate sample can be drawn for both retired and non-retired households.

The questionnaires should be designed to help answer the question, "Does retirement in a home community and ownership of a home result in better health, a more contented retirement existence, and more freedom from anxiety than has been found in more general studies of aged populations?"

If transportation is a problem in most small communities of this sort, what is the attitude of local authorities toward helping the situation? If they knew the importance of retired persons to local business and in generation of local revenue, would this make a difference?

If inflation is eroding their cash income base, what steps are being taken to counter it? Do relatives increase gifts? Do local merchants find ways of lowering costs? Are they being "forced" to take jobs in order to meet their needs?

Are all home communities "satisfactory" places for people to retire? Perhaps only some communities qualify.

FORMAT FOR ADDITIONAL STUDIES

What This Study Shows

This study has indicated several things that should be of importance in considering the situation of the aged. First, it revealed the fact that they were long time residents of the community, for the most part. Secondly, it revealed the fact that they felt secure in their environment; the youth-age conflict we hear so much about was lacking. Thirdly, it revealed the fact that they owned their own homes free of encumbrances. Fourthly, there was little indication of health problems, other than the usual slowing down of the aging process. Fifthly it indicated that they are important as a source of basic income flows to the local economy, being especially important in certain segments of it. Sixthly, it showed that, even where they were living among friends and relatives and 83% of them drove cars, they considered transportation to be a problem. Seventhly, it revealed that money incomes were quite low and Social Security made up about 39% of the total; since this is the only source indexed to the cost of living, the probability of money problems in the future is quite high. Eighthly, it revealed the fact that these retirees, most of whom had "good" jobs while working, were resisting reentering the labor force. Most of them did not want to work and those who did were willing to work part-time at a lower skill level than they were trained for, for the most part.

Is it true that retired people are not so concerned with adequacy of services as is the population in general?

Sample Design

The Vandalia study indicated that some sort of quota system would have to be employed for non-retirement households on a geographic sample in order to obtain the smaller number needed yet keep them random. Lists of retired persons proved difficult to obtain, so a geographic sample seems preferable.

Conclusions

This study provides some insights into the economic roles played by a retired population in a rather common environment, a small town with which they are well acquainted. Two general goals of the study are: 1) to find out how retired people interact economically in the local economy and 2) to determine a format for additional studies of this kind.

The relationship of retired persons to the economy is considered by examining three sub-areas: 1) ability of the community to provide goods and services, 2) the impact of expenditures by retired people upon economic activity in the community, and 3) participation by retired people in the labor force.

A general conclusion can be made that the retired persons' perceived needs are being taken care of except for transportation services. However, the study appears to be weak in the areas of provision of health services, recreation, finance, and other goods & services.

Retired persons' expenditures from income, other than that earned in the economy, rank behind Manufacturing, Trade, and Agriculture in the generation of personal income. In terms of tax generation they are third behind Agriculture and Manufacturing. But for generation of gross business they are again fourth behind Manufacturing, Agriculture, and Trade.

Their expenditures are especially important to the health services industry, generating 43.5% of its income. They generated over 10% of the local sales for 10 business categories, over 20% for seven categories and over 25% for six categories out of the 14 total in the economy.

The overall multiplier for all economic activity, including personal income and taxes, was 1.92 which was lower than those for other sources of basic income.

The general conclusion must be that much of the business and other economic activity in the area is directly and indirectly dependent on the spending of retired persons.

Retired persons did not appear to be much of a labor resource. About 70% were not working at paid employment. The 30% who worked preferred to work part-time, hence were working at jobs that did not employ their skills. The group, in general, were not working because they preferred it that way.

The study has been useful in identifying areas of needed concentration and some sampling problems, which information will be useful in future studies.

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Appendix Table 1
Direct and Indirect Business Impact of Retired Persons
(000)

Sector of Original Purchase	Farm		Durables	Auto Sales & Serv.	Other Retail	F. I. & R. E.	Trans. & Comm.	Utilities	Health Service	Pers. & Recreation	Other Service	Local Govern.	Total Dir. & Indir
	Supply	Food & Drink											
Purchase	171.5	558.4	129.0	554.0	224.7	432.3	124.0	496.6	378.2	71.4	12.0	175.9	3,301.0
Sectors Impacted by Purchases													
Mfg.	.1	.3				.8	0	.1	.6	.1		.2	2.7
Farms	176.9	6.5	1.9	.2	2.1	18.5	.5	3.0	13.7	2.8	.5	4.8	235.6
Food & Dr.	4.7	578.9	6.1	4.4	6.6	59.5	1.5	9.4	43.0	8.9	2.4	15.0	749.7
Durables	2.7	11.6	132.5	7.9	3.7	33.6	.9	5.4	24.6	5.1	.8	9.6	238.4
Auto	7.9	32.7	13.6	582.1	10.5	101.0	3.8	17.7	75.9	14.9	2.4	29.2	891.7
O. Ret.	1.3	5.5	1.6	3.7	227.9	16.9	.4	2.6	17.1	2.7	.5	4.0	284.2
F. I. & R. E.	4.4	16.1	5.2	11.3	8.1	555.8	.9	11.2	51.2	11.6	1.6	9.8	687.2
Tr. & Com.	1.1	7.4	2.0	4.7	3.7	14.9	124.4	3.2	12.4	5.9	.7	4.8	185.2
Util.	3.4	26.9	4.3	11.8	6.3	35.8	1.1	475.7	35.3	12.8	1.8	11.7	626.9
Whol.	.4	5.1	.6	11.5	.7	4.8	.2	36.0	4.2	1.3	.2	1.5	66.5
Health	1.0	4.3	1.3	2.9	1.4	12.4	.3	2.0	387.4	1.9	.3	3.2	418.4
Pers. & Rec.	.4	2.0	.6	1.3	.6	5.6	.1	.9	4.2	72.2	.1	1.4	89.4
Repair	.7	5.2	1.5	.9	1.6	12.3	.1	1.7	3.8	3.7	.4	2.0	34.9
O. Serv.	.2	.8	.3	.5	1.3	2.0	.1	.3	1.5	.3	12.1	.8	20.2
Total	205.2	703.3	171.6	657.9	274.6	873.9	134.3	569.2	674.9	144.2	23.9	98.0	4,531.0

Explanation of sectors

Manufacturing includes 2 refractories and 2 clothing factories and 2 small fabricators
Farm Supply Stores are Implement Dealers, some of whom also sell chemicals and feeds

Food and Drink includes grocery stores, cafes and bars
Durables include Furniture stores, appliance stores, hardware stores and lumber yards.

Auto Sales and Service includes auto agencies, repair garages and service stations
Other retailers include 1 drug store, 5 clothing stores, and 2 general merchandise types.

F. I. & R. E. includes banks, insurance and real estate agents, and other loaning agencies.
Transportation and Communication includes the Telephone Co., the railroad, and one trucking firm.

Utilities: electricity and sanitary services inside the city are sold by the city. Missouri utilities sells gas in the city and electricity and gas outside the city limits.

Repair service includes shoe repair, maintenance construction services etc.
The rest are self explanatory.

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