LIFE INSURANCE AND INVESTMENT
PREFERENCES OF SELECTED
KANSAS STATE UNIVERSITY PROFESSORS

by

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Major Professor
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INTRODUCTION

Background

Life insurance and investments are a means of providing financial security for the family. In 1962 two out of three persons in the United States were life insurance policyholders. The average amount of life insurance per family at the end of 1962 was $11,400. However, all families were not insured. The average amount of life insurance in force per families that were insured was $14,300. Both figures were more than twice that of a decade previously.

Life insurance defined as a contract where, for a stipulated consideration called the premium, one party (the insurer) agrees to pay the other party (the insured or his beneficiary) a fixed sum upon death or other specified event. Studies of insurance reveal life insurance is an essential part of family plans for financial security. In families consisting of husband, wife and children under 18, nearly nine out of ten husbands own some kind of life insurance. These were families which have the greatest need for protection from financial hardship should the husband die prematurely.

Even in families where there were no children under 18, the majority of husbands (eight out of ten) carried life insurance.

In 1962, ordinary life insurance was the leading type
of insurance in force in the United States, and group term life insurance was the second most important type. Group term life insurance was unknown until shortly after World War I. At the end of 1962, group term life insurance represented thirty-one per cent of all life insurance in the United States.\textsuperscript{12}

In addition to insurance protection, most families planning for financial security made provision for income maintenance, emergencies and large future expenditures through investments. Investment programs rose rapidly following World War II. According to a 1959 survey by the New York Stock Exchange, over three million individuals in households with incomes under $5,000 a year held some stocks or bonds.\textsuperscript{19}

A broad definition of investments includes various types of assets, such as stocks, bonds, savings accounts, home, business or other real estate. A savings account or a savings bond assures the owner of ready money for emergencies; but generally, dollars put into such holdings do not keep pace with rising prices. Carefully chosen equities, like common stocks or real estate, tends to better hold their purchasing power.\textsuperscript{4}

To determine professors' preferences, this report was concerned with determining the actual face value of all insurance policies held, and the actual equity of all investments for selected Kansas State University professors.
Purpose of the Study

This report was designed to determine by interview and questionnaire survey the voluntary insurance and investments held by Kansas State University professors as indicated by their insurance coverage and investments in stocks, bonds, savings, home, business and other real estate. Four academic ranks of Kansas State University professors were included in this report: assistant professor, associate professor, full professor, and department head. Deans, Directors, Superintendents, Instructors, and other full-time administrative personnel were excluded.

No current study was found for this wide a range of insurance and investment preferences. Furthermore, although recent studies have been made in the insurance area, none attempted to determine amounts carried by Kansas State University professors.

This report consolidated insurance and investment information that might be of significance to all strata of Kansas State University professors. For example, any professor could compare his amount of insurance and investments with the holdings of the comparable group reflected in this report.

Methodology

Two methods were used in the report to obtain data
for analysis of life insurance and investments: company records of policies; and interviews with policyholders. Where the purpose of the research is to obtain information concerning the characteristics of life insurance policies, company records of policies may be studied. Where the purpose is to assess socio-economic characteristics of owners, attitudes toward life insurance coverage and other aspects of consumer behavior, interviews and questionnaires obtained from a sample survey of the population are appropriate.14

The interview technique of gathering data has several advantages:

1. Questions may be rephrased if they are not understood by the respondent;

2. There is more opportunity in the interview situation to appraise accurateness of replies. The interviewer is in a position to observe not only what the respondent says but also how he says it;

3. The interview is a more appropriate technique for revealing information about complex emotionally laden subjects, or for probing beyond public attitudes into the more private sentiments;

4. People tend to be more willing to cooperate in a survey if all they have to do is talk; and

5. Questioning is particularly suited to obtain information about what a person knows, believes, expects,
intends, does or has done.\textsuperscript{2}

Sample surveys may be classified broadly into two types descriptive and analytical. In a descriptive survey, the objective is to obtain certain information about large groups; for example, the number of men, women, and children who view a certain television program. In an analytical survey, comparisons are made between different sub-groups of the population in order to discover whether differences exist among them that may enable the analyst to form, or to verify hypotheses about the forces at work in the population. Many surveys provide data that serve both purposes. The distinction between descriptive and analytical surveys is not, of course, clear-cut.\textsuperscript{5}

Studies of survey methods have been criticized because the basic data were inaccurate, surveys were too costly and samples were not representative. Inaccuracies may be minimized by use of trained interviewers and well constructed questions. The cost of a survey can be reduced if a representative sample is taken. Samples are drawn from a total population because the cost and time involved in surveying a total population are prohibitive in most cases. Estimates from sample data may be inaccurate for the particular sample may not be truly representative of the universe or population under study. This error can be lessened by using probability sampling methods and appropriate estimating techniques.\textsuperscript{17} Many times a small sample
has been preferable to attempted full coverage.\textsuperscript{16}

Validity and practicality are criteria frequently used in evaluating tests or survey devices. A test is valid if it measures with precision what it is designed to measure. It is practical if it is economical of time and money and is simple to give and interpret.\textsuperscript{18}

Kansas State University professors for this study were selected from the annual budget located in the Kansas State University Library. In addition University insurance records were used to determine the amount of term insurance carried by each one interviewed. Only full time nine and twelve month faculty members were included. Title, academic rank and total number of professors are listed in Table 1.

\textbf{Table 1. Title code, academic rank, and population.}

<table>
<thead>
<tr>
<th>Title code</th>
<th>Academic rank</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>4210</td>
<td>Department head</td>
<td>47</td>
</tr>
<tr>
<td>5210</td>
<td>Professor</td>
<td>157</td>
</tr>
<tr>
<td>6225</td>
<td>Associate professor</td>
<td>171</td>
</tr>
<tr>
<td>7230</td>
<td>Assistant professor</td>
<td>248</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>623</strong></td>
</tr>
</tbody>
</table>

Personnel who worked less than ten tenths time for nine or twelve months were excluded. Administrators, hourly personnel, branch station personnel and faculty with the academic rank of instructor or lower were excluded from this report.

Insurance and investment preferences presented were
obtained from actual current amounts reported by Kansas State University professors. No attempt was made to analyze the investments in regard to inflation, unfavorable market conditions or other economic forces. The analysis represented reported face value of insurance and equity in investments of selected professors at mid-year, 1964.

Involuntary insurance such as Social Security and the Kansas State University retirement plans were not included in this report. However, one should recognize that they influence the insurance preferences studied.

Size of the sample and method of sampling were recommended by Department of Statistics personnel. From the population or universe of six hundred twenty-three (623) professors, sixty-three (63) random numbers were selected from the four strata. Four additional numbers were selected from each stratum. Of these, sixteen (16) additional numbers, only six were needed. The random listing of numbers used was taken from a listing of the ten thousand (10,000) randomly assorted digits.\textsuperscript{17}

It was necessary to use two additional names to replace two persons who were on leave of absence from their regular places of employment. Three professors refused to complete a questionnaire or to answer questions during an interview. One claimed he was too busy; the other two preferred not to divulge their investment preferences. One professor was doing research in another state.
The interview schedule was designed to produce the investment information listed below:

1. Age of interviewee, as it may affect size of investment.

2. Number of dependents, as it may affect pattern of investment.

3. Number with a regular amount set aside for investments.

4. Amount of funds to the nearest one thousand dollars ($1,000) invested in life insurance, stocks, bonds, savings, home, business and other real estate, with emphasis on insurance.

5. The dollar amounts of each investment (necessary to compute the sample mean of each type of investment).

6. Information necessary to compute the standard error.

The insurance and investment questionnaire (Refer to the Appendix) contained sixteen blank spaces for answers. Five questions related to type of insurance and face amount of each policy. Two questions were listed to determine amount and type of stocks and bonds now owned. Three questions were used to obtain a breakdown on the type of savings held. Only one answer each was needed for equity in the home, business and other real estate.

Many interviews were made in the homes of professors as it often was impossible to set up interviews after work hours at the professors' office, laboratory or classroom.
Respondents were informed of the nature and purpose of the study, and were assured that all information would be confidential and that interviews were coded. Answers to the questions were sometimes recorded by the interviewer, but generally, they were recorded by the interviewee. As a survey form was completed, a quick review of the recorded answers was made and when interviewees had questions they were clarified by the interviewer.

Terminology

Terms used in this study defined below.

Investment. To the business man, investment is the acquisition of capital goods or the securities representing these goods from which income may be derived. Investment implies taking a certain risk to enhance the possible income return. When the element of risk is reduced sufficiently, savings occur.

Security analysts use a more modern explanation of investment. Graham and Dodd advanced the concept of investment now used by security analysts. Their definition describes an investment as an operation which, upon thorough analysis, promised safety of principal and a satisfactory return.

Investments are also a means by which families may increase their financial security. In the broad, or customary sense of the term, an investment is any asset or prop-
erty right acquired or held by an individual for the purpose of conserving capital or earning an income. This definition recognizes that savings accounts, bonds, mortgages, some lines of life insurance, corporate stock, real estate, business equities, and other earning assets all fulfill the same basic function, that of employing their owners' funds.

In this report the above broad definition of investment "any asset or property right acquired or held by an individual for the purpose of conserving capital or earning an income," is used with the restriction that it will apply only to stocks, bonds, savings, home, business and real estate.

Insurance. Life insurance may be condensed into five major types of policy: whole-life, limited-payment life, endowment, term, and other.

Whole-life, also referred to as ordinary, straight-life or level premium insurance, provides continuous protection against death of the insured for a specific principal amount that remains constant throughout the policyholder's life. The lowest rates at which this type of insurance is available are furnished by a straight-life policy, in which the premiums are payable until death. This policy eventually accumulates enough reserve to mature it. Some companies regard such a policy paid up at age 80 or 85 and provide that no further premiums be collected from the few individuals who survive that age.
Whole-life protection may be purchased under two types of contracts, the chief difference being the method of payment, therefore, one is known as an ordinary life policy; the other is a limited-payment life policy. The ordinary life policy is the one of all policies which gives the maximum, permanent protection at a minimum annual cost. This may be illustrated by comparing the gross premium charges by companies for ordinary life policies with those required under the limited payment and endowment plans. For instance, the annual premium charges for a certain non-participating policy per $1,000 of ordinary life insurance is $16.56 at age 25, $19.10 at age 30, and $22.24 at age 35. On a twenty-payment life policy at the same ages this company's annual premium charges are $28.16, $30.78 and $34.06, while on an endowment policy, maturing in twenty years its premiums are, respectively, $47.07, $47.12 and $47.71.

Whole-life insurance has the following advantages; it gives the insured permanent protection at moderate cost and combines saving with insurance. Its chief disadvantage is the continued payment of the premium throughout life.

Limited-payment policies involve a fixed number of payments. Customarily the payments cease after ten, fifteen, or twenty years. This plan is much like the whole-life except it requires larger premiums during the normally shorter premium payment period.
Endowment insurance policies provide not only for payment of the face of the policy upon the death of the insured during a fixed term of years, but also; for the payment of the full face amount at the end of said term if the insured is living. This type of policy may be written for ten, fifteen, twenty, twenty-five, or even seventy or more years. When written for a short term, the purpose of the policy usually is to combine immediate protection with heavy savings; while if written for longer terms, or to mature at an advanced age, the object usually is to combine protection with old age income.

Term insurance may be defined as a contract which furnishes life insurance protection for a limited number of years, the face value of the policy being payable only if death occurs during the stipulated term, and nothing being paid after the limited years elapse. In this form of insurance the insured pays a premium equal to the annual estimated cost or death risk for the period covered. It is like fire insurance in that it is insurance only against death during a given period.

Term policies are especially designed to afford protection against contingencies which either require only temporary insurance or call for the largest amount of insurance protection for the time stipulated at the lowest possible cost. Pure term insurance is justified under the following circumstances;
1. For persons with a small income for the present, with family obligations but with prospects for the development of a career.

2. For persons who have placed substantially all their resources in the material assets of a new business still in its formative stages, and where premature death of the human factor in that business would spell serious loss or destruction of the invested capital.

3. As a supplement to investment insurance for persons of ordinary means during the child raising period.

4. As additional protection for loans.

5. As a means of hedging against definitely known hazards.

The disadvantage of term insurance is that nothing is paid to the insured after the policy expires. The premium increases as the insured gets older and some term insurance policies require the insured to take a physical examination at the end of each term.

**Face (Amount).** Life insurance "face" refers to the amount of insurance that appears on the face of the policy. It is the amount that will be paid by the insurance company to the beneficiary in case of death of the insured, or to the policyholder if the policy matures before death.

**Stocks.** Stocks "individual" refer to corporation stock on which ownership is obtained by purchase of a certificate or share. Stock certificates are transferable by endorsement.
Stock "mutual funds" represent an investment in a fund. The company operating the funds invests its capital in various marketable securities and divides the net income periodically among owners of shares in the funds, in proportion to the amounts of the investors' respective holdings.

Equity. Equity is the actual cash outlay that a professor has invested in his home, business or other real estate.

Review of Pertinent Studies

Insurance Studies. Surveys have been made to determine the personal and financial characteristics of life insurance holders. Some that relate to elements of this report follow.

The average amount of life insurance per insured family at year-end 1962 was $14,300\(^ {12}\) Group term life insurance represented thirty-one per cent of the total insurance in force in the United States during 1962. Six of every seven American families owned life insurance as a way to build a more secure future.

Investment Studies. In organizing individual investment programs studies usually recommend the acquisition of adequate life insurance, a liquid emergency fund, business and home investments, and a general investments portfolio\(^ {4}\).

A study on the pattern of financial asset ownership for individuals was made in Wisconsin\(^ {1}\). The data used in that study was obtained from individual income tax re-
turns. The Department of Taxation of the State of Wisconsin, University of Wisconsin, National Bureau of Economic Research and a grant from the Carnegie Corporation made that study possible. The study attempted to set forth what is known about the pattern of individual preferences.

For example, lower income groups tended to hold their investment portfolio in the form of debt funds (bonds, mortgages and savings accounts), whereas, individuals in the upper income groups tended to hold their investment in equity funds (common and preferred stock).¹

There was some concern by economists at the rate of savings in the second quarter of 1964. Savings represented eight and two-tenths per cent of disposable income compared to seven per cent that economists regard as normal.¹¹ At eight and two-tenths per cent of current savings from disposable personal income, more than $35 billion per year would be available for personal savings. This is $4 billion more than was recorded for the first quarter of 1964.²

Another essential part of investment preferences pertained to purchase of a home. The probability of maintaining his family as a cohesive unit is enhanced by the stability engendered through establishment in an owned home.⁶ Families are more readily accepted as established members of their communities and the formation of satisfying social contacts is considerably facilitated.⁶

The purchase of a home is an important investment,
the final decision should be preceded by careful deliberation analyzing both the desirability of the property and the individual requirements of the purchaser. There should be reasonable assurance that the value of one's location is comparatively stable; for property values may decline and make it difficult to resell at a favorable price.6

The home owner has this investment under his constant supervision and control, and it saves the amount otherwise required to rent a residence. Improvements, repairs and alterations to the property, if properly planned, may be arranged to suit his convenience and pleasure, besides adding equity to his investment. Interest and taxes are significant factors and save the home owner money when deductions are listed on the income tax return.3

Total value of new private construction in 1950 was $23,091 million compared with $45,378 million in 1962. Current spending on home building, only, was estimated by the Census Bureau at an adjusted annual rate of $25,051 million.7

Real estate investment very often is riskier than investment in the common stock of a strong growing company listed on the New York Stock Exchange. A building is a building tied to one location. But a company like General Electric or DuPont is flexible, diversified and has continuity of management.9

In conclusion, some writers recommended life insurance,
savings and a home as the initial investments that a prudent person should acquire. Then a balance among stock, bonds, cash and real estate should be achieved.9

Limitations of the Report

Insurance and investment preferences of the Kansas State University professor’s was restricted by the nature of the questionnaire. Only full-time nine month or full-time twelve month professors were included. Professors teaching three hours each week might have different plans of investment from full-time professors.

Care should be taken in comparing the amount of equity with the face value of insurance for a distorted value of total investment could be reflected. For example, a professor that has made one payment on an insurance policy would own the face amount of the insurance policy. However, a professor making one payment on a house would own only the equity value of the one payment.

Respondents reported information from recall and the amount of investments were rounded to an even one thousand dollars. However, any over-reporting probably was offset by under-reporting, so that no great bias exists.

Survey and questionnaire information has definite limitations as source material for data on investments held, because the respondent may misinterpret a question or record his response in a baffling manner. There is usually little
that can be done to remedy the situation. It has been estimated that for the purposes of filling out even simple written questionnaires, at least 10 per cent of the adult population of the United States is illiterate.\textsuperscript{13}

FINDINGS AND ANALYSES

Investment by Age Groups

The average investment by age and number of dependents is presented in Table 2.

Table 2. Ages by five year groups, average number of dependents, number of professors and total average investment.

<table>
<thead>
<tr>
<th>Ages</th>
<th>Average number of dependents</th>
<th>Number of professors</th>
<th>Total average investment (in $1,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>26-30</td>
<td>4.0</td>
<td>1</td>
<td>$2</td>
</tr>
<tr>
<td>31-35</td>
<td>3.0</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>36-40</td>
<td>3.3</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>41-45</td>
<td>3.1</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>46-50</td>
<td>3.0</td>
<td>7</td>
<td>30</td>
</tr>
<tr>
<td>51-55</td>
<td>2.8</td>
<td>5</td>
<td>39</td>
</tr>
<tr>
<td>56-60</td>
<td>1.7</td>
<td>10</td>
<td>66</td>
</tr>
<tr>
<td>61-65</td>
<td>1.3</td>
<td>6</td>
<td>60</td>
</tr>
<tr>
<td>66-70</td>
<td>1.0</td>
<td>1</td>
<td>41</td>
</tr>
</tbody>
</table>

The above information indicates that the average number of dependents is highest when professors are below age 30 and that the number does not consistently decrease until age 41. Reliance of 26 through 30 age grouping may not be high because only one professor was randomly selected in that age group; however the information indicates a relation-
ship between number of dependents and the average amount of investment. During the ages 26 to 41 total average investment is smaller than in later years when the average number of dependents is decreasing and higher incomes are common.

Participation in Regular Investment Plans

Of the sixty-three professors contacted only 19.1 percent had a regular plan of setting a definite amount aside each month for investments, see Table 3.

Table 3. Rank of professor, number with a regular plan and number without a regular investment plan.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Number with a regular plan</th>
<th>Number without a regular plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department head</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Professor</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Assoc. professor</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>Ass't. professor</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>Total numbers</td>
<td>12</td>
<td>51</td>
</tr>
</tbody>
</table>

Responses from the sixty-three (63) investment questionnaires were tabulated by stratum of professors on a work sheet. The estimated mean and standard error were computed for each type of investment. Approximate formula used in computing the estimated mean and standard error was taken from Snedecor.17 Table 4 shows the type of investment, sample mean and standard error.
Table 4. Type of insurance or investment, sample mean and standard error of mean (In thousands)

<table>
<thead>
<tr>
<th>Type of insurance or investment</th>
<th>Sample mean</th>
<th>Standard error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insurance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whole-life</td>
<td>$5.70</td>
<td>.74</td>
</tr>
<tr>
<td>Endowment</td>
<td>5.01</td>
<td>.97</td>
</tr>
<tr>
<td>Term (group)</td>
<td>7.73</td>
<td>.91</td>
</tr>
<tr>
<td>Credit life</td>
<td>.43</td>
<td>.24</td>
</tr>
<tr>
<td>Other</td>
<td>.65</td>
<td>.33</td>
</tr>
<tr>
<td>Stock</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual (corp.)</td>
<td>3.30</td>
<td>2.20</td>
</tr>
<tr>
<td>Mutual funds</td>
<td>.25</td>
<td>.99</td>
</tr>
<tr>
<td>Bonds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td>.60</td>
<td>.22</td>
</tr>
<tr>
<td>Corporate</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>Savings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Savings and loan</td>
<td>1.00</td>
<td>.23</td>
</tr>
<tr>
<td>Bank</td>
<td>1.16</td>
<td>.21</td>
</tr>
<tr>
<td>Credit union</td>
<td>.08</td>
<td>.04</td>
</tr>
<tr>
<td>Home (equity)</td>
<td>13.81</td>
<td>1.14</td>
</tr>
<tr>
<td>Business or real estate</td>
<td>8.90</td>
<td>2.51</td>
</tr>
</tbody>
</table>

The greatest standard error is $2,500 which indicates wide variability for investments in business and other real estate among faculty members. Individual stock also has a high standard error; this would also indicate that the amount of stock purchased by professors was not uniform. Some professors purchased no stock while a few purchased a large dollar amount.

Personnel in the statistical department at Kansas State University indicated that arithmetic computations may be used to give a sufficiently accurate analysis of this survey in-
formation.

Investment by Stratum of Professors

To determine if certain patterns of investment preferences were used by different stratum of professors, the information reported may be condensed from nine choices, into four categories, home, business or other real estate, savings and stock. The average amount of each type of investment is included in Table 5.

Table 5. Strata of professors, average amount of each type of investment and total investments (In thousands).

<table>
<thead>
<tr>
<th>Stratum of professors</th>
<th>Type of investment</th>
<th>Business or real estate</th>
<th>Savings</th>
<th>Stock</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department head</td>
<td>$23</td>
<td>$15</td>
<td>$10</td>
<td>$34</td>
<td>$82</td>
</tr>
<tr>
<td>Professor</td>
<td>18</td>
<td>17</td>
<td>3</td>
<td>2</td>
<td>40</td>
</tr>
<tr>
<td>Assoc. professor</td>
<td>14</td>
<td>10</td>
<td>3</td>
<td>3</td>
<td>29</td>
</tr>
<tr>
<td>Ass't. professor</td>
<td>10</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>15</td>
</tr>
</tbody>
</table>

Homes were found to be the most prominent investment in three of the four investment strata. Average invested in business or real estate (other than homes) show that three of the four strata have this type of investment for second choice. An established investment preference by stratum was indicated under savings. Department heads maintained larger average savings than the combined average savings of all other strata of professors. Average investment in stock represents a high amount for department heads but a small
amount for assistant professors. An unexpected finding was that associate professors had more invested in stock than full professors who were not department heads.

Investment Preferences

To compare investment preferences further the preferences are ranked from one through four in Table 6.

Table 6. Type of investment, professors preference of investment by stratum.

<table>
<thead>
<tr>
<th>Type of investment</th>
<th>Professors preference of investment by stratum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dept. head</td>
</tr>
<tr>
<td>Home</td>
<td>2</td>
</tr>
<tr>
<td>Business or real estate</td>
<td>3</td>
</tr>
<tr>
<td>Savings</td>
<td>4</td>
</tr>
<tr>
<td>Stocks</td>
<td>1</td>
</tr>
</tbody>
</table>

It is quite clear that the investment pattern of department heads does not follow that of the three other strata. However, Table 6 shows with considerable certainty, that the majority of professors' investment preferences rank in this order: first, home; second, business or other real estate; third, savings; and fourth, stocks.

By excluding stock and using the three investment preferences by stratum of professors, the total investment is:

1. Department heads $48,000
2. Professors 38,000
3. Associate professors 26,000
4. Assistant professors 14,000
Permanent and Temporary Insurance

To analyze the insurance preferences it is summarized into two types of insurance, permanent and temporary. Whole-life, endowment and other (retirement income) are considered permanent insurance. Term and credit life (decreasing term) are classified as temporary. In Table 7 one column designates the average amount of insurance furnished through the Kansas State University group plan.

Table 7. Rank of professors, average amount of permanent insurance, temporary insurance and Kansas State University group insurance (In thousands).

<table>
<thead>
<tr>
<th>Rank</th>
<th>Permanent</th>
<th>Temporary</th>
<th>K.S.U. group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor head</td>
<td>9</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Professor</td>
<td>16</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Associate Prof.</td>
<td>9</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Assistant Prof.</td>
<td>9</td>
<td>8</td>
<td>4</td>
</tr>
</tbody>
</table>

* Also included in temporary insurance.

Professors in this sample have $1,222,000 of insurance coverage, 44.5 per cent of which is temporary. The Kansas State University group insurance plan insures 65.1 per cent of the total temporary insurance reported. If total coverage is extended to include all six hundred and twenty-three professors they would have a total of $12,084,219 insurance coverage.
Insurance Preferences

Permanent insurance was favored by three of the four academic ranks studied. Consequently, an analysis of the preference within three different types of insurance carried is presented in Table 8 to show the preference of insurance by stratum of professor. To consolidate information in this table "other" and "credit life" were distributed to one of the two major types of insurance, endowment or term, as explained for Table 7.

Table 8. Type of insurance and professors' preferences of insurance by stratum (In thousands).

<table>
<thead>
<tr>
<th>Type of Insurance</th>
<th>Professors' preference of insurance by stratum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole-life</td>
<td>$7  $7  $3  $6</td>
</tr>
<tr>
<td>Endowment</td>
<td>1    9   5   3</td>
</tr>
<tr>
<td>Term</td>
<td>10   11  6   8</td>
</tr>
</tbody>
</table>

Of the term insurance, 65.1 per cent or $5,590 per professor was furnished through the Kansas State University group plan. The above analysis indicates that professors' choice of insurance falls in this order: first, term; second, whole-life; and third, endowment.

SUMMARY AND CONCLUSIONS

This report was concerned with determining the investment and insurance preferences of Kansas State University professors based upon data gathered by individual personal
interviews of a random sample of the population. The method of determining the universe or population was established by the writer following a study of Snedecor. The method of selecting the sample from the universe was suggested by members of the statistics department.

The average investment by age and number of dependents was directly related to the total amount invested. The calculations Table 2 indicate that professors average investment was under $18,000 where there were more than three dependents per family. The total investment reached a peak between ages 56 through 60. The lowest investment period was between the ages of 26 thru 30. After age 60 the total average amount of investment declined.

Nearly eighty per cent of the professors interviewed had no consistent plan of setting funds aside for a regular plan of investments. Twenty-five per cent of the full professors cited definite plans of setting funds aside for investment, but no department head had a regular plan.

Homes were ranked as the largest single type of investment. Business and other real estate were second and stocks were third.

Statistical tests were computed for only a sample mean and standard error, as other tests for significance were not appropriate. Nevertheless, this study may suggest a potentially significant pattern of insurance and investment preference used by Kansas State University professors. If
similar studies of personnel at other institutions under the Kansas Board of Regents gave similar results, the information could be valuable to the Board of Regents and to administrators under the jurisdiction of the Board of Regents, as well as to self-financing plans for faculty groups.

Greatest fluctuation in the amount of investment was found in two areas, stocks combined with business and other real estate. A greater consistency of preference patterns were established for the assistant, associate and full professor than for the department heads. However, grouping all professors, showed their investment preferences to be in this rank order: home, business and other real estate, savings and stocks.

A further analysis of the insurance showed 44.5 percent of the coverage was temporary or term insurance and the remainder was permanent insurance, whole-life or endowment. Based upon the reported insurance information, all professors at Kansas State University would have had $12,084,219 face value of insurance. Type of insurance preferred was in this order: term, whole-life and endowment.
ACKNOWLEDGMENTS

The writer is particularly indebted to and sincerely appreciated the efforts, guidance and helpful criticism of Professor Conrad Erikson in the development of this study and the encouragement and constructive criticism of Professor Leslie Marcus.
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This questionnaire is designed to obtain actual insurance and investment preferences of Kansas State University faculty with academic rank of assistant professor, associate professor, full professor and department head. Information will remain confidential and will be evaluated and included in a Master's Report.

Your cooperation in completing the following questions at your earliest convenience will be greatly appreciated.

I. What is your present age?

II. How many dependents do you claim?

III. Do you set a definite sum aside each month for investments?

IV. How much do you have invested in each of the following? (round to $1000)

<table>
<thead>
<tr>
<th>1. Life insurance</th>
<th>Amount</th>
<th>No. of Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Whole-life</td>
<td>$_____</td>
<td>____________</td>
</tr>
<tr>
<td>b. Endowment (20-30 yr.)</td>
<td>_______</td>
<td>____________</td>
</tr>
<tr>
<td>c. Term (group)</td>
<td>_______</td>
<td>____________</td>
</tr>
<tr>
<td>d. Credit life (mortgage)</td>
<td>_______</td>
<td>____________</td>
</tr>
<tr>
<td>e. Other (specify)</td>
<td>_______</td>
<td>____________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Stocks</th>
<th>Amount</th>
<th>No. of Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Individual</td>
<td>$_____</td>
<td>____________</td>
</tr>
<tr>
<td>b. Mutual funds</td>
<td>$_____</td>
<td>$__________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Bonds</th>
<th>Amount</th>
<th>No. of Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Gov't. Bond</td>
<td>$_____</td>
<td>$__________</td>
</tr>
<tr>
<td>b. Corp. Bond</td>
<td>$_____</td>
<td>$__________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Savings</th>
<th>Amount</th>
<th>No. of Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Savings &amp; Loan</td>
<td>$______</td>
<td>$__________</td>
</tr>
<tr>
<td>b. Bank</td>
<td>$______</td>
<td>$__________</td>
</tr>
<tr>
<td>c. Credit Union</td>
<td>$______</td>
<td>$__________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. Home (equity)</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$______</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. Business or other real estate (equity)</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$______</td>
</tr>
</tbody>
</table>

V. Thank you for completing this questionnaire. If you would like a summary of the report, please indicate: yes____; no____.
LIFE INSURANCE AND INVESTMENT
PREFERENCES OF SELECTED
KANSAS STATE UNIVERSITY PROFESSORS

by

MARVIN A. THOMPSON
B. S., Kansas State Teachers College of Emporia, 1953

AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

College of Commerce

KANSAS STATE UNIVERSITY
MANHATTAN, KANSAS

1965
Life insurance and good investments are a means of providing financial security for the surviving family should loss of income resulting from death occur to the breadwinner.

This report was concerned with determining the voluntary insurance and investment preferences of Kansas State University professors as indicated by a random sample of selected professors. The specific objectives were: (1) to determine the type and amount of life insurance coverage of four strata of faculty with the ranks of assistant professor, associate professor, full professor and department head, (2) to determine the average amount invested in stocks, bonds, savings, home and business or other real estate per professor by strata of faculty. A secondary objective was to determine the proportion of insurance carried by Kansas State University professors through the University group plan.

Previous studies of life insurance ownership have indicated that over eighty per cent of all the American families own life insurance as a way to build a more secure future. Even though many families are insured other writers had concluded that there was no such thing as a typical policyholder.

The data analyzed in this report were obtained by personal interview with sixty-three professors and from the University budget and University faculty insurance records.