7-19-1963

The Variable Annuity

Danny J. James

THE VARIABLE ANNUITY

(TITLE)

BY

Danny J. James

PLAN B PAPER

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE DEGREE MASTER OF SCIENCE IN EDUCATION
AND PREPARED IN COURSE

Business Education 480

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY,
CHARLESTON, ILLINOIS

1963
YEAR

I HEREBY RECOMMEND THIS PLAN B PAPER BE ACCEPTED AS
FULFILLING THIS PART OF THE DEGREE, M.S. IN ED.

7/19/63
DATE

[redacted]
ADVISER

7/19/63
DATE

[redacted]
DEPARTMENT HEAD

ACKNOWLEDGMENTS

The author wishes to express his appreciation to Dr. Clifford L. Fagan, Chairman, Department of Marketing, Eastern Illinois University, for the material, support, time, and constructive criticism he gave in order that this study might be completed.

The author also wishes to express his appreciation to Dr. James F. Giffin, Chairman, School of Business, Eastern Illinois University, for the time and constructive criticism he gave toward the completion of this study.

TABLE OF CONTENTS

INTRODUCTION

Retirement was relatively simple in the past; people merely "put by" for their old age and were confident that they would have a comfortable income. However, today it is not enough for one to save in order to assure oneself an income which is adequate for retirement purposes. Inflation has in the past and probably will continue in the future to deflate or destroy the purchasing power of saved dollars. Because of inflation, it now takes two dollars to purchase the goods and services that one dollar would have purchased about fifteen years ago and fifteen years ago it took almost two dollars to purchase the goods and services that one dollar would have purchased sixty years earlier. This trend threatens to continue and, if the last fifteen years are any indication of what is to come, inflation could almost completely destroy a lifetime of saving. Therefore, the prudent individual today is looking for some way or ways to invest his savings so that their value will tend to increase, or decrease, with the general price levels of goods and services.

The astute individual tries to ensure a continuous standard of living by increasing his current income as the price levels rise. However, to protect accumulated savings, an individual must place them in some medium of investment which will most likely increase in value in some proportion to the decreased value of the original dollars invested.

A relatively new approach to this problem is an investment in a variable annuity contract. A variable annuity contract is a life insurance annuity contract which is designed not only to give annuitants a lifetime income after retirement, but also to give them a retirement income which is commensurate with the general price levels of goods and services during their retirement period, even though the general price levels of these goods and services may fluctuate.

I. HISTORY OF THE VARIABLE ANNUITY

On October 5, 1951, a group of educators and laymen met with a specific purpose in mind--to hear a presentation expounding a new proposal in the life insurance field. This committee was the Special Commission of Educators and Laymen and the new proposal was the variable annuity. The proposal was based on a 1950 study conducted by the Teachers Insurance and Annuity Association (commonly called TIAA). The commission recommended that the proposed College Retirement Equities Fund (commonly called CREF) be established. This was done by a Special Act of the New York State Legislature in March, 1952. With legislative approval, the newly created College Retirement Equities Fund, in conjunction with the Teachers Insurance and Annuity Association, started operations on July 1, 1952.[1]

The Study

The reason that a study, which eventually led to the variable annuity proposal, was undertaken is quite simple. During the years just after World War II, inflation began to greatly reduce the purchasing power of individuals with a fixed income. These individuals, for the most part, were retired persons, already on a reduced standard of living. Concern for this group, and the realization that there would be many others in the same situation, led to the study.[2]

The objective of this study was to discover what would have been the approximate experience of a 100 per cent fixed income fund, a 100 per cent common stock fund, and a combined fund since 1880.[3]

The study was based on the Cost of Living Index; the Common Stock Price Index; and a comparison of the interest rates earned by life insurance companies with the interest yields of common stocks. This study was also broken down to show what two identical investments of $100 a year in 30, 20, and 10-year accumulation periods would do if invested in a

---

[1]William C. Greenough, A New Approach To Retirement Income (New York: Teachers Insurance and Annuity Association, 1955), p. 4.

[2]Davis W. Gregg, Life and Health Insurance Handbook (Homewood, Illinois: Richard D. Irwin, Inc., 1959), p. 338.

[3]Greenough, op. cit., p. 17.

fixed dollar fund, a common stock fund, or a combined fund.[1]

In the 30-year accumulation periods, four of the five periods studied ended with a rise in the cost of living that was considerably above the average for that same period and in every case a variable or combined annuity would have produced more income for retirement purposes.[2] There were six 20-year periods studied, and in five of these the cost of living increased and as was the case with the 30-year periods, either a variable or combined annuity would have produced more income again.[3] In addition, the seven 10-year periods studied revealed data which still seemed to prove that either a variable or combined annuity would tend to produce an income which would follow the cost of living.[4] These studies show that the purchasing power of a fixed dollar fund tends to be somewhat lower than the purchasing power of both the variable and the combined fund, or at least this would have occurred during almost any period since 1880. Therefore, it seems natural that this would continue to be the pattern in the future.

The conclusions reached by the Teachers Insurance and Annuity Association based upon their study are as follows:[5]

---

[1]Ibid., pp. 34-40.

[2]Ibid., p. 36.

[3]Ibid., p. 40.

[4]Ibid., p. 40.

[5]Ibid., pp. 13-16.

1. It is unwise to commit all of one's retirement savings to dollar obligations, since decreases in the purchasing power of the dollar can seriously reduce the value of a fixed income annuity. Increases in the purchasing power of the dollar, on the other hand, improve the status of the owner of a fixed income annuity.

2. It is equally unwise to commit all of one's retirement savings to equity investments, since variations in prices of common stocks are much too pronounced to permit full reliance on them for the stable income needed during retirement. Changes in the value of common stocks and other equities are by no means perfectly correlated with cost of living changes, but they have provided a considerably better protection against inflation than have debt obligations.

3. Contributions to a retirement plan that are invested partly in debt obligations and partly in common stocks through an Equities Fund providing lifetime annuities offer promise of supplying retirement income that is at once reasonably free from violent fluctuations in amount and from serious depreciation through price level changes.

4. The Equities Fund should make no dollar guarantees. Its liabilities should always be valued directly in terms of its assets. This is a cardinal point of the suggested arrangement for two principal reasons:

   a. It assures that the Equities Fund is "failure proof" in the technical sense and cannot be forced into liquidation of its assets at a low point in the market. Whether the market be high or low, the Equities Fund obligations are automatically limited to the then market value of its assets. Typical pension plans whose liabilities are expressed in dollar guarantees and whose assets are partially in fluctuating securities, such as common stocks, are vulnerable in this area.

   b. It assures the individual participant his full prorata share in any rise in the net asset value of the Equities Fund. Under typical pension plans invested partially in common stocks, the employer gives a fixed dollar pension assurance to his employees. Any appreciation in common stock values is normally used to reduce the employer's cost or to create reserves, whereas it is needed in a period of rising prices as an increased benefit for the employees. Through a common stock fund free from the confinements of dollar promises, a participant can have a wider opportunity to share in the development of the American economy with part of his savings. Obviously, this opportunity to share in rises must be accompanied by a willingness to share in falls of the net asset values.

5. Common stock investments obtained through purchases month by month, at low prices as well as high, would have provided a very effective method of investing a portion of retirement funds. Most of the difficulties in individual investing in equities arise from lack of diversification both among shares and over time. So long as the period of regular payments into a fund invested in common stocks was reasonably long, so long as each person owned a portion of a large, well-diversified fund and so long as there were no substantial shifts either into or out of equities at a particular moment, the experience was normally considerably better than that of a fund invested wholly or principally in debt obligations.

6. Substantial problems exist whenever an individual has the option to invest a large single payment in either an equities fund or a fixed dollar fund. Therefore, in establishing the Equities Fund, careful decisions must be made as to whether to permit, and if so on what basis to permit, the following:

a. Lump sum payments into the Equities Fund, including:

(1) Transfer of part of an individual's existing fixed dollar savings for retirement into the Equities Fund.

(2) Payments of additional single premiums.

(3) Issuance of single premium Equities Fund annuities.

b. Transfer of accumulations in the Equities Fund as a lump sum payment to a fixed dollar fund prior to or at the time of retirement.

c. Change by the employer or the participant in the proportion of premiums paid to the Equities Fund and the fixed dollar fund.
d. Lump sum payments to a beneficiary as a death benefit.

7. When continuing periodic payments are to be made into the Equities Fund over a reasonably long period of years, the level of common stock prices at the time the payments are started is relatively unimportant. Likewise, the retirement date is unimportant if the individual elects to purchase a unit annuity with his Equities Fund accumulation and a traditional annuity with his fixed dollar accumulations.

8. The level of common stock prices at the time when the Equities Fund itself is established is relatively unimportant for those who will invest in it for a reasonably long time.

It was from these conclusions and the data that they were based on that the Special Commission of Educators and Laymen recommended that the College Retirement Equities Fund be established. This laid the groundwork for other companies to enter this new field and was also what might be called the "spark" which started an industry-wide conflict.

II. DEFINITION AND PURPOSE OF THE VARIABLE ANNUITY

A variable annuity is an annuity which pays periodic payments to an annuitant for life after retirement, the size of the payments depending chiefly upon the market value of a portfolio of equity assets which, are for the most part, common stocks.[1]

---

[1]Gregg, *op. cit.*, p. 338.

The purpose of the variable annuity is mainly twofold: (1) to give the annuitant protection against spiraling inflation which threatens to render savings almost useless; and (2) to give the annuitant an opportunity to participate in the economic growth of our nation.[1]

The variable annuity cannot guarantee perfect protection against a decline in the purchasing power of the dollar. It does, however, offer investment features which provide greater advantages for such protection than do the investment features of a conventional annuity based upon bond investment only. This is simple to see because the investment in bonds tends to produce a much lower interest return than does the investment in common stocks. However, the principle of "no perfect protection" is also self-evident, because bonds return a stable interest rate in a declining economy whereas common stocks do not.

III. THE VARIABLE ANNUITY VS THE MUTUAL FUND

Even though the variable annuity, as sponsored by the College Retirement Equities Fund, is operational, its sale to the general public is quite limited. If variable annuities are sold openly to the general public, the first to feel the

---

[1]Robert I. Mehr and Emerson Cammack, Principles of Insurance (Homewood, Illinois: Richard D. Irwin, Inc., 1961), p. 544.

pinch will probably be the mutual funds. This is so because much of the rapid growth in the mutual-fund shareholder accounts can probably be attributed to buyers planning for retirement.[1]

There are, however, four distinct differences between a variable annuity contract and a mutual-fund share. These are as follows:[2]

1. First, the variable annuity guarantees the annuitant an income that he cannot outlive and his retirement income is based on actuarial principles. The mutual fund guarantees nothing and retirement income is not based on actuarial principles.

2. The second difference concerns the provisions governing surrender of the contracts. The shareholder in a mutual fund may sell out at will, whereas under most variable annuity plans the policyholder cannot cash out in less than thirty-six months. It is contended that this feature of the variable annuity will discourage speculation and encourage long-term savings.

3. The third difference lies in the timing of benefits. The mutual-fund shareholder usually gets benefits as profit is received or realized by the fund itself. Under

---

[1]Leonard E. Morrissey, "Dispute Over The Variable Annuity," Harvard Business Review, XXXV (January-February, 1957), p. 81.

[2]Ibid., pp. 81-82.

the variable annuity, the policyholder will receive no direct benefits until retirement. Thus, the variable annuity emphasizes savings and retirement, while the mutual fund emphasizes speculation.

4. The fourth difference is the tax status of the variable annuity as opposed to that of the mutual fund. A mutual fund must currently distribute most of its earnings and capital gains in order to avoid paying a federal income tax. The variable annuity, as explained next, has a deferred tax feature.

IV. TAX TREATMENT OF THE VARIABLE ANNUITY

In 1959, the federal government passed The Life Insurance Tax Act which specifically recognizes that variable annuities are life insurance instruments for federal tax purposes. This means that variable annuity companies are taxed exactly the same as life insurance companies. As a result, this means a small (if any) tax on the net investment income which is set aside for the variable annuity policyholder, and a twenty-five per cent tax on realized capital gains.[1]

The policyholder has no personal income tax to pay on any increment in the value of his annuity until he actually

---

[1]Harold A. Dunlan and O. Lee Bodenhamer, "The Variable Annuity," The Arkansas Economist, II (Fall, 1959), p. 8.

receives it. This means that the policyholder defers personal income tax on increases in value until retirement years.[1] During the years of retirement, the increment is taxed as ordinary income as it is received. That is, only that part of the yearly annuity payment received which represents the increase in value (profit) is taxed during the year received. In addition, most persons are able to claim a double exemption during retirement years which means that even less federal tax will have to be paid.

V. THE CREF VARIABLE ANNUITY

Eligibility

Eligibility to participate in the CREF program is restricted to faculty and staff members of colleges, universities, and independent schools. Therefore, only about one-half of one per cent of the total population is eligible.

Investment Policy

CREF's investment policy is based on a dollar cost averaging fund which is diversified over time and among industries and companies. This is done by investing all receipts fully and immediately in common stocks. Investments are made monthly, whether prices are going up, down, or are standing still. Thus, CREF is a long-range investment medium which can tie in with the economic growth of the

---

[1] Ibid., p. 8.

country and is not bothered nor concerned with short-term market positions and swings.[1]

Differences

In addition to being available to a very limited and select group, the CREF variable annuity differs from other variable annuities now offered, or proposed to be offered, to the general public. These differences are as follows:[2]

1. Most of the premiums paid to CREF are combination contributions by employer and employee which are usually set as a level percentage of each participant's salary.

2. CREF's premium income tends to be stable because college salaries are relatively stable and unemployment of college teachers is quite rare.

3. CREF variable annuities provide full and immediate vesting of all contributions in the participant.

4. Protection against adverse performance of common stocks selected is provided by the equal contribution feature (for every dollar invested in CREF variable annuity contracts, at least one matching dollar must be invested in the TIAA fixed dollar annuity).

5. CREF variable annuities have no loan or cash surrender values because the premiums and accumulated earnings

---

[1] William C. Greenough, "The CREF Variable Annuity - The First Ten Years' Experience," The Journal of the American Society of Chartered Life Underwriters, XVII (Winter, 1963), p. 34.

[2] Ibid., p. 35.

are for the long pull and provide only retirement or survivor benefits. This also strengthens the stability of accumulated funds because it precludes the sudden withdrawal of funds and the use of CREF as a short-term investment medium.

How It Works

Although the College Retirement Equities Fund works in conjunction with the Teachers Insurance and Annuity Association and has co-ordinated management, it is a financially separate institution. CREF did not alter in any way the operations of TIAA, but undertook to those eligible the issuance of variable annuities as a supplement to the fixed dollar annuities issued by TIAA.[1]

The policyholder can invest his full annuity premium with TIAA, or if he participates in CREF, he may invest 1/4, 1/3, or 1/2 in CREF and the rest in TIAA. The premiums paid to TIAA are used to buy fixed dollar annuities. The premiums paid to CREF are used to buy common stocks, whose values tend to rise during periods of inflation and fall during periods of recession. This means that when the cost of living rises, the annuitant will probably get more dollars and when it falls he will probably get fewer dollars.[2] By crossing the two parts of this system and having TIAA paying

---

[1]Gregg, op. cit., p. 340.

[2]Teachers Insurance and Annuity Association - College Retirement Equities Fund, Your Retirement Annuity, (New York: Teachers Insurance and Annuity Association - College Retirement Equities Fund, 1963), pp. 2-5.

a stipulated amount and CREF a variable amount, the participant, in a manner of speaking, plays both ends against the middle, thereby providing himself with a hedge against both inflation and deflation.

The CREF variable annuity should actually be considered as something that has two distinct stages. First, there are the premium paying years, called the accumulation stage. Secondly, there are the benefit years, which are called the annuity stage.

During the accumulation stage, the participant and, usually, his employer make monthly payments to CREF. These payments are used to buy accumulation units and the number bought each month depends upon the closing stock prices for the last day of the month. If stock prices are up during a particular month, fewer units are purchased. If, on the other hand, stock prices are down during a particular month, a larger number of accumulation units are purchased.[1] For example, a $60.00 a month premium might purchase two accumulation units one time and then at a later date a $60.00 premium might purchase three accumulation units.

The annuity stage begins when the policyholder retires and starts receiving an annuity. Upon retirement, an individual's accumulation units are converted into annuity units. The individual is then paid the cash value of so many

---

[1] Gregg, op. cit., pp. 340-1.

units a month. To determine the number of annuity units payable to the individual each month for the remainder of his life, the total current value of his accumulation units is divided by the product of the then current value of one annuity unit and an annuity factor that depends upon the age of the individual and the type of annuity he selected. Once the number of annuity units is determined, it remains constant throughout the life of the annuitant.[1] However, the retirement income of the annuitant can fluctuate, depending upon the performance of common stocks, which, in turn, affects the price or value of an annuity unit.

The CREF annuity unit is not revalued once a month as is the accumulation unit. Instead, it is recomputed once a year. This is done so that the annuitant will know exactly what his income for the next year will be and can budget accordingly. Besides reflecting changes in common stock prices and dividend payments, the yearly recomputation of an annuity unit reflects changes in mortality experience and expense items.[2]

As an example of the difference in income received from a fixed annuity and a combined annuity (one-half fixed and one-half variable which is the CREF plan), a hypothetical case can be constructed. A professor who contributed $100

---

[1] Ibid., p. 341.

[2] Ibid., p. 341.

per year toward the purchase of a fixed dollar annuity from 1900 to 1930 would have received an annual annuity of $552 when he retired in 1930. If, however, he had contributed $50 of the annual $100 toward a variable annuity, he would have received $276 annual fixed annuity payments plus a fluctuating amount from the variable annuity. His combined annuity would have ranged from a low of $503 in 1932 to a high of $1,007 in 1950, the end of this hypothetical period. During this twenty year period of hypothetical retirement, 1932 would have been the only year in which the variable annuity would have paid less than the fixed dollar annuity. As a matter of total income over this twenty year period, the combined annuity would have paid the annuitant $14,617, as compared with $11,040 for the fixed dollar annuity.[1] This is a total difference of $3,577. On the average this is a difference of $178.85 a year or $14.90 a month.

VI. EXPERIENCE OF THE CREF PROGRAM

As of July 1, 1962, the CREF plan had been in operation for exactly ten years. After being in operation for this length of time, the answers to several questions concerning the variable annuity, at least in a restricted sense, can be

---

[1]Leonard E. Morrissey, THE VARIABLE ANNUITY - Will It Yield More Dollars for Retirement?, A Report published by the Amos Tuck School under a grant from the Alfred P. Sloan Foundation (Hanover, New Hampshire: The Amos Tuck School of Business Administration, 1955), p. 3.

answered with some degree of accuracy. Even though CREF's actions are confined to a clientele which is select and few in number, possibly even atypical from the general population in many ways because of their advanced education, the results of the CREF variable annuity venture, nevertheless, is the one best measure to determine what the variable annuity will do when actually in operation; how those eligible to participate have reacted; what pattern of investments has been made; and what effect, if any, the purchase of a variable annuity policy has had on the security of the participants.

Reaction to CREF

The speed with which the CREF plan was adopted by many is somewhat amazing. Within six months after the start of operations, more than half of the 620 institutions participating in TIAA had made it possible for their faculty and staff members to participate in CREF. By July, 1962, the end of the first ten years, almost all of the 1,100 institutions participating in TIAA made participation in CREF available on an optional basis, and some even require CREF participation. Where participation in CREF is optional, approximately eighty-five per cent of the faculty and staff members elect to participate in CREF.[1]

---

[1] Teachers Insurance and Annuity Association - College Retirement Equities Fund, CREF--The First Ten Years' Experience, A Report to Participants (New York: Teachers Insurance and Annuity Association - College Retirement Equities Fund, 1962), p. 3.

Investment Pattern

CREF is currently investing $3.5 million per month. These investments are currently in some 17 industry groups and in 78 companies within these groups. The total value of investments, as of May 1, 1962, was $215,408,000. Emphasis is given not only to diversification, but also to specialized industry groups within the diversified portfolio of common stocks. Special emphasis is given to particular industry groups when the officials of CREF feel that one particular industry group has special growth potentials.[1] The table, which appears on the next page, shows the investment trend, or pattern, of CREF's portfolio every four years from 1952 to 1960 and then for 1962 which is the last year for which figures are available.

The table is quite interesting, it reveals what the CREF investors believed to be the industry groups with the most growth potential during the early years and what changes were made between 1952 and 1962. For example, the chemical and oil industries investment percentage was cut approximately in half; the container and railroad industries were dropped; investment in retail trade appears to be on its way out; two industries, which were considered relatively unimportant at first, were added; and the only industries which show any significant growth in investments are the public

[1] Ibid., p. 4.

CREF INVESTMENT PATTERN

Industry Group	1952	1956	1960	1962
		Share of Total		
Automobile	5.0%	3.6%	1.2%	1.8%
Building	6.7	5.5	4.8	2.9
Chemical	19.2	15.7	10.8	9.3
Communications	...	...	...	1.4
Container	3.0	2.5	...	...
Drug	1.7	...	3.4	5.6
Electrical	4.6	4.9	5.6	7.8
Finance	...	...	...	1.5
Food	3.1	2.6	4.2	4.5
Non-Ferrous Metal	0.8	4.8	3.2	3.0
Office Equipment	1.4	5.2	8.9	8.2
Oil	19.1	20.4	12.0	11.4
Paper and Publishing	3.8	4.6	5.1	5.0
Photographic Equipment	1.3	...	2.8	3.6
Public Utility	17.5	15.6	20.7	21.0
Railroad	1.6	...	...	...
Retail Trade	5.6	1.4	...	0.8
Steel	...	3.0	4.5	1.8
Tire and Rubber	1.9	2.8	2.8	1.6
Miscellaneous	3.7	7.4	10.0	8.8
Total	100.0	100.0	100.0	100.0

utility, drug, and office equipment industries. Another interesting fact revealed by this table is that of the six industries considered to be the best investments in 1952 (had five or more per cent of total investment in each industry) only in one of these industries has the investment grown and in all the other five, it has dropped. In two of these five industry groups, investment has dropped to the point that it is almost negligiable. Thus, it can be seen that CREF's investments are continuously changing in an effort to meet changing market conditions.

Security of Participants

In order to gauge the performance of the variable annuity as written by CREF under actual working conditions, it is necessary to present some illustrative examples. Had a participant made $50 monthly contributions to CREF since July 1, 1952, to December 31, 1961, he would have made total payments of $5,700 and would have had accumulation units valued at $12,016. However, because of the falling prices on the stock market, a participant would have had at the end of April, 1962, accumulation units valued at $10,923 and, at the same time, would have increased his payments by $200, making a total premium investment of $5,900.[1] Thus, at the end of 1961, a participant would have earned 211 per cent on his investment, and by the end of April, 1962, only four months later, the interest earned would have dropped to 185 per cent.

The accumulation unit hit its high in November, 1961, when the stock market was at a peak. The value of the accumulation unit at this peak time was $32.45. From this peak, the accumulation unit value has been generally downward and hit a 43 month low of $22.53 in June, 1962.[2] The table on the next page shows the monthly value of the accumulation unit from July, 1952, to May, 1962.

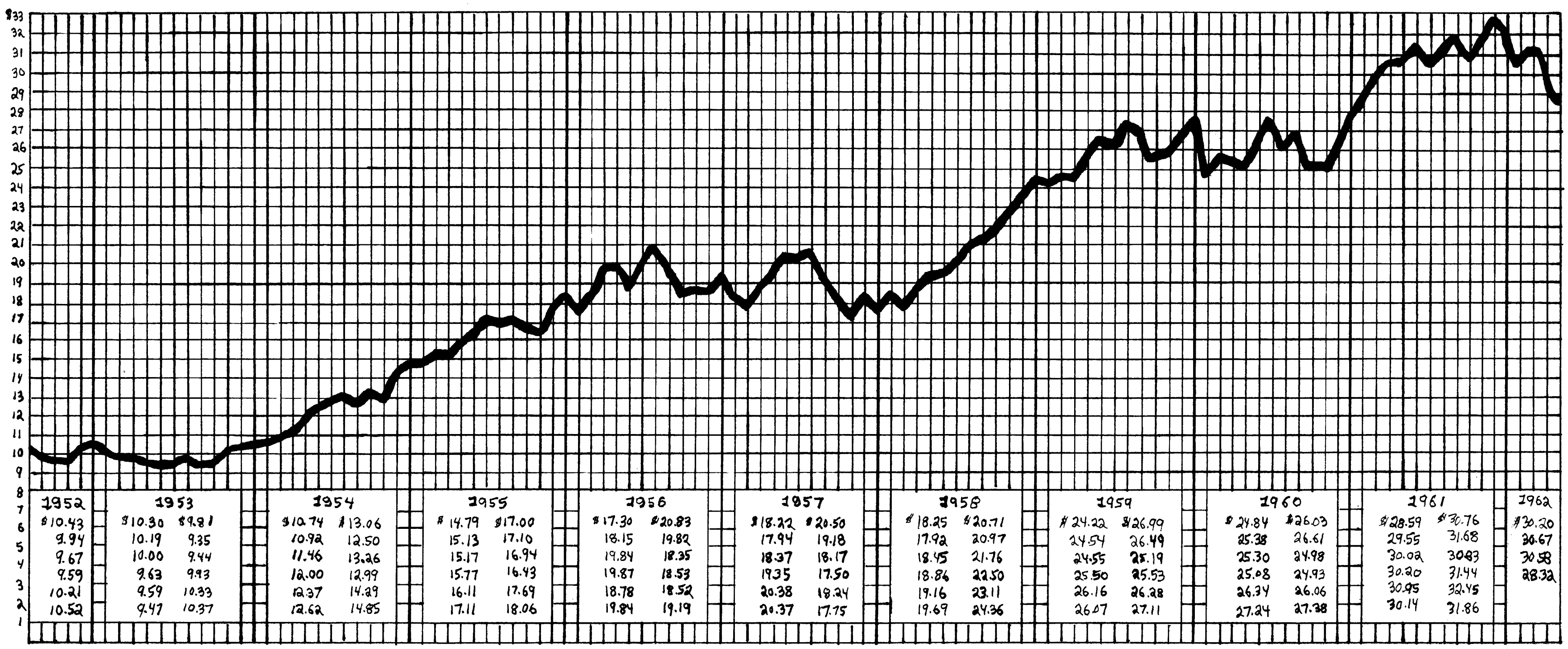
---

[1] Ibid., p. 5.

[2] The Wall Street Journal (New York), April 15, 1963.

MONTHLY ACCUMULATION UNIT VALUES

JULY 1, 1952 THROUGH MAY 1, 1962



The annuity unit, which is the unit value used to pay retired participants, was $26.25 during the year 1961-62; $26.13 for the year 1962-63; and down 14 per cent for the year 1963-64 to $22.68.[1]

It might seem, especially when first looking at the above table, that the general upward trend of the accumulation unit since 1952 would indicate that will always be the pattern. To assume this would be to base too much conjecture on too little evidence. Relatively speaking, ten years is a short period of time and cannot prove any definite pattern. It must be remembered that there will be sharp declines and, most likely, even some declines that may last over a period of several years. No one knows or can predict what the stock market will do over a long period of time; however, man's only method of predicting the future lies in the statistics of the past and it can be assumed, at least with a relative degree of accuracy, that the statistics which led to the establishment of CREF and its experience up to this point show that it is a step in the right direction, at least so far as those few eligible to participate in it are concerned.

From the above information, it is safe to assume that the CREF plan has, at least at the present time, enhanced the security of those college professors who participate.

---

[1] Ibid.

Investment Ability

The investments which CREF made during its first ten years of operation were well above average. That is, CREF's ability to invest in common stocks was superior to the investment ability of the average investor, and the growth of the common stock investments made by CREF was superior to the growth of the stocks selected which make up the Dow-Jones Industrial Average the Standard and Poor's Industrial Average. The table on the next page compares the percentage growth of the common stock investments made by CREF with the percentage growth of the Dow-Jones Industrial Averages and Standard and Poor's Industrial Averages.

This table clearly shows that the investment ability of CREF has improved over its mediocre start; is definitely tied to the up and down cyclical swings of the stock market; has consistently improved to a much greater degree than the Dow-Jones Industrial Average since early 1956 and has, in fact, since that time, when its investments were not so good as the Dow-Jones Industrial Average, outstripped it some forty per cent; and has, since early 1958, when it overtook the Standard and Poor's Industrial Average Index, not only almost always outperformed it, but also has been less volatile. Thus, CREF has shown that its investment ability is excellent, as well as consistently improving.

COMMON STOCK INVESTMENT AVERAGES

Date	Accumulation Unit Value	Percentage of total Gain or Loss	Dow-Jones Industrial Closing Averages	Percentage of total Gain or Loss	Standard & Poor's Industrial Closing Averages	Percentage of total Gain or Loss
July 31, 1952	10.43		279.56		25.82	
Jan. 31, 1953	10.30	.0125	289.77	.035	26.62	.031
July 31, 1953	9.81	.059	272.82	.024	24.91	.035
Jan. 31, 1954	10.74	.0297	292.39	.046	26.22	.015
July 31, 1954	13.06	.252	347.92	.245	31.44	.218
Jan. 31, 1955	14.79	.418	408.83	.462	37.99	.471
July 31, 1955	17.00	.629	465.85	.666	45.85	.776
Jan. 31, 1956	17.30	.659	470.74	.684	46.44	.799
July 31, 1956	20.83	.997	517.18	.852	52.88	104.8
Jan. 31, 1957	18.22	.747	479.16	.714	47.51	.84
July 31, 1957	20.50	.965	508.52	.819	51.88	100.9
Jan. 31, 1958	18.25	.75	450.02	.61	44.54	.725
July 31, 1958	20.71	.986	502.99	.779	50.38	.951
Jan. 31, 1959	24.22	132.2	593.96	112.5	59.12	129.
July 31, 1959	26.99	158.8	674.88	141.4	65.10	152.1
Jan. 31, 1960	24.84	138.2	622.62	122.7	59.43	130.2
July 31, 1960	26.03	149.6	616.73	120.6	58.96	128.4
Jan. 31, 1961	28.59	174.1	648.20	131.9	65.38	153.2
July 31, 1961	30.76	194.9	705.37	152.3	70.65	173.6
Jan. 31, 1962	30.20	189.5	700.00	150.4	72.77	181.8
Total Percentage of Gain		189.5		150.4		181.8

VII. EXPANSION OF THE VARIABLE ANNUITY

At the present time the sale of the variable annuity is limited to CREF and a very few other plans. As with any new innovation or idea, there are two divergent points of view concerning the desirability of selling the variable annuity to the general public. The insurance industry is split between those who feel that the variable annuity should be offered to the general public and those who feel that the general public should not be offered the variable annuity, at least by the insurance industry. The Prudential Insurance Company, the world's second largest insurance company, heads the list of companies trying to promote the sale of variable annuities to the general public. The world's largest insurance company, The Metropolitan Insurance Company, heads the list of companies opposing the sale of the variable annuity to the general public.

The positive side of the variable annuity in the CREF plan has already been presented and it should suffice to quote a Prudential executive in a statement that seems to be typical of the feeling of those companies which wish to make the variable annuity available for sale to the general public in all states. The quotation is as follows: "In the first stage, a new idea is ridiculed; in the second stage, it is severely opposed; and in the third stage, having become accepted, it is considered as being self-evident."[1]

Metropolitan, although recognizing that the variable annuity would open an entirely new and lucrative field to the life insurance companies in this country, stands ready to defend its position of opposition. Again, it seems that the leader speaks for the rest of the group and, therefore, presents the arguments that are typical of those who oppose the mass sale of the variable annuity to the general public. Metropolitan's arguments are, in general, as follows:[2]

1. The variable annuity is a substantial departure from life insurance and would, therefore, if issued cause a basic change in the fundamental nature of the life insurance business. This fundamental change would be the almost complete transfer of risk to the individual policyholder.

2. The mass sale of variable annuities is not the correct way to fight inflation. In fact, the variable annuity could very well cause more inflation. Instead of encouraging future inflation, life insurance companies should encourage the stabilizing of the dollar; for it is people of limited means who suffer most by inflation and it is these same people who make up the bulk of the life insurance policyholders. Therefore, the life insurance companies should lead the way

---

[1]William Freund, "The Status and Prospects of Variable Annuities," Journal of Finance, XVII (May, 1962), p. 177.

[2]Frederick W. Ecker, "Variable Annuities," Bests Insurance News - Life Edition, (June, 1958), p. 15.

in the fight against further inflation, rather than inaugurate devices based upon the acceptance of inflation as being inevitable.

3. The variable annuity is contrary to the idea of savings, which is, in actuality, the backbone of economic growth. Variable annuities, if sold to the general public, would undermine any and all programs intended to combat inflation, because in addition to discouraging savings, they would encourage speculation which, in turn, would cause more inflation. In addition, since the greatest sales argument for variable annuities is based on the inflationary spiral, those who encourage this form of annuity are actually trying to perpetuate a disservice on the working people of the United States.

4. The variable annuity would actually prove to be unsatisfactory. It is one of those ideas which, in theory, should work but does not because it fails to take the individual into consideration and is instead based on charts, theories, and unproven trends.

5. The retired person, living on the income from a variable annuity, would be unable to adjust his standard of living to the highly volatile course of common stock investments. Quite often the average stock price index has gone down while the consumers' price index has gone up, or has declined by much less. There have been eight periods since

1900 in which stock prices have dropped 40 per cent or more and at the same time consumer prices have never fallen more than 20 per cent and have sometimes risen. An example of the latter would be the period from October, 1939 to April, 1942 when stock prices fell 40 per cent and the cost of living rose 15 per cent.

6. The widespread issuance of variable annuity contracts would, because of the heavy purchase of common stocks by life insurance companies, eventually lead to virtual domination of individual enterprise by the life insurance companies.

7. The poor showings of variable annuities might cause the public to lose confidence in life insurance companies. This is so because the public, as a result of its dealings with life insurance companies over a great number of years, has come to identify life insurance companies with contracts providing guaranteed benefits under which the full risk involved is borne by the company. In addition, the variable annuity would be under the control of the insurance commissioner and sold by life insurance agents, which would tend to lull the public into a false feeling of security.

In addition to the reasons explained above, there are other arguments against the sale of the variable annuity to the general public by life insurance companies. These are as follows: (1) the sale of life insurance would be made much more difficult; (2) the various states would probably implement many more and much stricter regulations; (3) the door would be left open for the federal government to regulate because of the purchase of common stocks; and (4) it would be much more difficult to train agents to sell both fixed dollar and variable annuities.[1]

VII. LEGISLATION AND REGULATION

Because of legislative and regulatory impediments, the present and future legal status of variable annuities for sale to the general public is clouded. The Participating Annuity Life Insurance Company was organized April 10, 1954, in Fayetteville, Arkansas, and was the first company to sell variable annuities to the general public. The first sale took place in Fayetteville on October 21, 1954.[2] However, at the present time this company is not selling any variable annuities, because it is awaiting further regulatory action.

The Prudential Insurance Company, in 1955, requested legislative approval to allow it to establish separate investment accounts in New Jersey for the purpose of selling variable annuities. The bills asking for this legislation were bottled up in the New Jersey Senate committees during

---

[1]Morrissey, THE VARIABLE ANNUITY - Will It Yield More Dollars for Retirement?, pp. 11-12.

[2]Dunlan, *op. cit.*, p. 11.

the years 1955, 1956, and 1957. In 1958, several amendments which were designed specifically to strengthen the regulatory requirements and the authority of the State Insurance Commissioner were added to the bill. This paved the way for passage of the bill and in 1959 New Jersey authorized the sale of variable annuities to the general public by the Prudential Insurance Company.[1]

Because of the introduction of bills favoring the sale of the variable annuity to the general public in New Jersey, additional interest was stimulated in this field. In December, 1955, the Variable Annuity Life Insurance Company was organized in the District of Columbia. This company was organized as a stock life insurance company for the specific purpose of selling variable annuity contracts. In July, 1956, the Equity Annuity Life Insurance Company was also established in the District of Columbia. Both companies were established under the provisions of the Life Insurance Act of the District of Columbia, which was patterned after the New York bill which authorized the establishment of the College Retirement Equities Fund.[2] The main difference in the two bills was that the District of Columbia bill authorized the sale of variable annuity contracts to the general public instead of to just one specific and select group.

---

[1]Freund, op. cit., pp. 184-5.

[2]Ibid., p. 185.

Shortly after the organization of these companies, the Securities and Exchange Commission (SEC) brought injunctive proceedings to prohibit the sale of variable annuity contracts until these companies and their contracts were registered with the SEC. The first and second court decisions rebuffed the SEC. But, on March 23, 1959, the Supreme Court of the United States upheld the SEC ruling that even though the Variable Annuity Life Insurance Company and the Equity Annuity Life Insurance Company were both incorporated as insurance companies in the District of Columbia and authorized by the insurance departments of some states to engage in the sale of the variable annuity, they did not come within the federal definition of "insurance" or "insurance company," as such terms were used in the exemptive provisions of the federal securities acts, and were, therefore, subject to regulation by the SEC.[1]

The effect of this decision caused Prudential to voluntarily enter into discussions with the SEC. With the permission of the SEC, Prudential has filed formal application for complete exemption from some of the provisions of the federal securities acts which could be interpreted as applying to variable annuities. This was done because Prudential feels that because of the character of its operations, the insurance nature of its variable annuity contracts, and the state

---

[1]Ibid., p. 185.

regulations to which it is already subject, these laws, at least for Prudential, are unnecessary because they are inappropriate, inadequate, and duplicative.[1]

Despite the action of the Supreme Court, several states have taken favorable action toward the sale of the variable annuity to the general public. Those states, in addition to the District of Columbia, which have either taken favorable legislative action or have allowed the sale of variable annuities without any legislative action are as follows:[2]

1. Alabama
2. Arkansas
3. Colorado
4. Connecticut
5. Florida
6. Indiana
7. Iowa
8. Kentucky
9. Massachusetts
10. Nebraska
11. Nevada
12. New Jersey
13. New Mexico
14. West Virginia

IX. THE FUTURE

The future of the variable annuity is somewhat uncertain because of a great many factors. The variable annuity, as written by CREF, seems to be well established and will probably continue to grow at a fast pace. In addition, there are several other variable annuity plans, mostly covering the employees of a certain company, which appear to be prospering, growing, and gaining in popularity. However, the variable annuity for sale to the general public

---

[1]Ibid., p. 186.

[2]Ibid., p. 186.

does not enjoy the same status as those available only to special groups. Although variable annuities have been for sale to the general public off and on since 1954, there has, as yet, been no clear-cut indication that would definitely prove that the variable annuity will be sold on a mass scale to the general public.

The reasons that the variable annuity, for sale to the general public, is presently in a state of indirection are as follows:

1. The insurance industry is currently waging a fight over the variable annuity which is actually indecisive and, therefore, precludes the insurance industry from giving its unanimous backing and support to legislative proposals which would further the cause of the variable annuity.

2. The insurance industry has, in several instances, been stopped from selling the variable annuity and most states have not given any indication that they would favor the sale of variable annuities to the general public.

3. The insurance industry, for the most part, is presently under the control of the various state governments. If the variable annuity is sold throughout the nation to the general public, there is good reason to believe that federal controls might be provided which would not only affect the sale of the variable annuity and those companies offering it for sale, but also all other insurance companies and all insurance contracts.

X. CONCLUSIONS

The conclusions reached by this writer, based upon this paper; the readings done in the research of this paper; and his general philosophy as applied to business matters are probably, for the most part, inconsistent with the so-called progressive and the more liberal points of view concerning the matter under discussion.

On the positive side, this writer feels that there is a place for the variable annuity, but only on a very limited scale. That is, the variable annuity, as written by CREF, while it is a great help to the select few participating, is also almost completely free of the evils which could be attributed to publically sold variable annuities because of its relatively unimportant size.

The sale of variable annuity contracts by the existing life insurance companies to the general public could, in addition to factors mentioned earlier in this paper, cause many more problems. These are as follows:

1. Even though no company would at the present time emphasize anything other than the retirement aspects of the variable annuity, speculation would sooner or later become a major selling point.

2. Although the intentions of the variable annuity advocates are unquestionably good and their integrity is also unquestioned, the almost free licensing of companies for the

purpose of writing variable annuities will almost certainly bring the dishonest and the unscrupulous who will use money for their own personal gain at the expense of the unsuspecting policyholder.

3. The very large life insurance companies could become much more dominant in the insurance industry; dominant to the point that they would have almost complete monopolistic control over the whole insurance industry because they have the resourses and the power to almost virtually control a new innovation such as the variable annuity.

Because of the reasons mentioned above, in addition to the other reasons mentioned in this paper, it is concluded that variable annuities are not good for the general welfare of the general populace of this country. However, it is concluded that variable annuities for special groups are in the best public interest so long as they do not exercise any control over the stock prices or over the economy. If at any time special interest variable annuities start to exercise control over stock prices or the economy, they should not only be controlled, but eliminated in a manner that is consistent with the judicial practices of this country.

REFERENCES

Books

Greenough, William C. A New Approach To Retirement Income. New York: Teachers Insurance and Annuity Association of America, 1955.

Gregg, Davis W. Life and Health Insurance Handbook. Homewood, Illinois: Richard D. Irwin, Inc., 1959.

Mehr, Robert I., and Cammack, Emerson. Principles of Insurance. Homewood, Illinois: Richard D. Irwin, Inc., 1961.

Mehr, Robert I., and Osler, Robert W. Modern Life Insurance. New York: The Macmillan Company, 1956.

Articles and Periodicals

Day, J. Edward. "A Responsibility to Expand," Best's Insurance News - Life Edition, LX (May, 1959).

Dunlan, Harold A., and Bodenhamer, O. Lee. "The Variable Annuity," The Arkansas Economist, XX (Fall, 1959).

Ecker, Frederick W. "Variable Annuities," Best's Insurance News - Life Edition, (June, 1958).

Freund, William. "The Status and Prospects of Variable Annuities," Journal of Finance, XVII (May, 1962).

Greenough, William C. "The CREF Variable Annuity - The First Ten Years' Experience," The Journal of the American Society of Chartered Life Underwriters, XVII (Winter, 1963).

Morrissey, Leonard E. "Dispute Over the Variable Annuity," Harvard Business Review, XXXV (January-February, 1957).

Ockels, Forrest S. "The Use of the Variable Annuity," Best's Insurance News - Life Edition, LXIII (May, 1962).

Shanks, Carol M. "Variable Annuities," Best's Insurance News - Life Edition, (June, 1959).

Soldofsky, Robert M. "A Case Study of the First Variable Annuity Program," The Commercial and Financial Chronicle, CXC (August 13, 1959).

The Wall Street Journal. April 15, 1963.

Reports

Morrissey, Leonard E. The Variable Annuity - Will It Yield More Dollars for Retirement? Hanover, New Hampshire: The Amos Tuck School of Business Administration, 1955.

Teachers Insurance and Annuity Association - College Retirement Equities Fund. CREF - The First Ten Years' Experience. A Report to Participants. New York: Teachers Insurance and Annuity Association - College Retirement Equities Fund, 1962.

Teachers Insurance and Annuity Association - College Retirement Equities Fund. Your Retirement Annuity. New York: Teachers Insurance and Annuity Association - College Retirement Equities Fund, 1963.