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A Study to determine whether it is better to buy a whole life policy or buy term insurance and invest the difference

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A STUDY TO DETERMINE WHETHER IT IS BETTER TO BUY A WHOLE LIFE POLICY OR BUY TERM INSURANCE AND INVEST THE DIFFERENCE

By

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CHAPTER I

INTRODUCTION

"Call it what you may--godsend, gamble, necessary evil--life insurance has a peculiarly important role to play in the modern family scene. Where once a succession of grandparents, uncles, cousins, and kinfolk twice removed was ready to stand in loco parentis, today a typical family unit can seldom look much beyond its own household for economic security when the chief provider dies."[1] The loss of a family's primary source of income usually creates a huge financial gap only partially bridged by social security benefits, savings, and investments. Families that would not resign themselves to the risk of hardship leave little choice but to insure the life of the breadwinner heavily.

Objective of the Paper

For many years, there has been a controversy concerning two types of life insurance policies. The two in question are whole life and term insurance. Because term insurance has no savings element and whole life does, critics say that

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[1]Editors of Consumer Reports, The Consumers Union Report on Life Insurance (Mount Vernon, New York: Consumers Union of U.S., Inc., 1972), p. 13.

purchasing term insurance and investing the difference,[2] would be more advantageous than buying a whole life policy. Ten out of eleven life insurance agents who have been interviewed for this paper have claimed that in the long run, whole life would be superior to term insurance. The objective of this paper is to determine which insurance plan would be the best--buying whole life or term insurance with the difference invested.

Scope and Research Procedure

The topics discussed will include, (1) the basic policies available and the provisions included within them, (2) controversial issues dealing with cash values and the various forms of net costing, (3) the agent's part played in selling particular policies, and (4) finally, actual comparisons of whole life versus term insurance with the difference invested in a savings account and in mutual funds. Publications from various insurance companies and personal interviews with life insurance agents have been the primary sources of information used in this paper.

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[2]The words "invest the difference," frequently used in this paper, refer to the excess amount of premiums for whole life insurance as opposed to term insurance.

CHAPTER II

THE BASIC LIFE INSURANCE PRINCIPLE

The life insurance principle is based on actuarial computations which are explained in this chapter. Most of the hazards that people are exposed to daily are insignificant and involve neither loss of life nor serious financial consequences. However, there are many common events, such as fires, tornadoes, automobile accidents, diseases, and others that cause serious losses whenever they occur. When these disasters result in the death of an individual, the potential earnings for his loved ones are lost and if he is not adequately insured, hardship to his family results.

Economic Value of a Human Life

The most fundamental of all life insurance concepts is the idea that a human life has economic value. Premature death destroys the potential earnings of an individual and the consequences of the loss fall upon those persons who had depended upon that particular person's income stream for support. The most common examples of such dependents are, of course, wives and children. Death of the breadwinner terminates the family's source of income. It can be seen that the continued existence of a human life is of direct

economic benefit to those who are dependent upon it for support and the death of an individual terminates such support. What, then, is the exact monetary value of a human life?

While it is possible to formulate more complex measures, the value of human life amounts essentially to the present value of future earnings. Thus, if an individual at age thirty-five earns a salary of $10,000 each year, he can expect to earn at least $300,000 before he retires at age sixty-five. Certainly this figure would be a bare minimum, since he normally would expect salary increases during this period and might conceivably work past the age of sixty-five. From the standpoint of a dependent family, however, and the concept of present worth, the figure of $300,000 is too high.

Each wage earner must pay taxes and these outlays reduce the amount of money directly available to the family. Each wage earner will spend some money on himself for such things as food, clothing and other items. This, too, reduces the amount of earnings directly available for family support. Suppose then, that the individual with expected future earnings of $300,000 and an annual salary of $10,000 pays $2,000 in taxes of all types and, in addition, spends $1,000 annually on himself. The amount on which the family is dependent is, then, $7,000.[1] The future earnings that would be lost to the family should the wage earner die, would be $210,000 ($7,000 times 30 years). This figure of $210,000 should be refined

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[1] J. D. Hammond and Arthur L. Williams, Essentials of Life Insurance (Glenview, Ill.: Scott, Foreman and Company, 1968), p. 2.

even further through the use of interest and present values because it represents an unrealistic picture of a human life value.

In order to find out exactly what the human life value represents, present value methods should be used. The present value of an annuity should be used whenever one wants to find out the net worth of a fixed income for a specified number of years. In this case, the interest factor for a thirty year, 4 percent annuity is found to be 17.292.[2] Multiplying this factor by the $7,000 annual income, gives $121,044. The present value of an annuity is presented below.[3]

$$An = R \times IF$$
$$An = \$7,000 \times 17.292$$
$$An = \$121,044$$

The present value of an annuity formula certainly has a drastic effect on the original $210,000, but it does represent a more realistic picture of the human life value for a particular wage earner. This value is lost upon the death of the wage earner. So it is the purpose of life insurance to reduce the financial burden of death for one's dependents by replacing, at least in part, the lost earnings which would have been received had an individual continued to live.[4]

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[2] J. Fred Weston and Eugene F. Brigham, Managerial Finance (3rd ed.; New York: Holt, Rhinehart and Winston, 1969), p. 821.

[3] Ibid., p. 150.

[4] Hammond and Williams, Essentials of Life Insurance, p. 2.

Inflation Effects on Life Insurance Proceeds

If one plans to use a life insurance policy as an investment he might find that it would prove to be a poor one if used alone, since inflation tends to have an adverse effect on life insurance proceeds. Historically, money has been a bad investment, and it is unrealistic to assume that present currency will do what no currency in history has ever done--retain its real value in purchasing power. The Phoenix Mutual Life Insurance Company advertisements picturing a man sitting in a boat fishing are familiar. In the "balloon" above his head, it originally read, "How I retired on $100 per month." Later, the figure became $150, $200, $250 and then $300.[5] These advertisements tell one, as dramatically as possible, the story of inflation and its effect upon the millions who placed their confidence in someone's promise to deliver a fixed number of dollars at some date in the future. What has become of the early purchasers who paid the premiums for years on a policy that would pay them $100 per month? For certain, they are not sitting in that Phoenix rowboat in carefree retirement, they are probably working at odd jobs trying to keep going or relying mostly on social security benefits in order to survive. The great fortunes in America were not built through accumulation of money in savings accounts, in life insurance

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[5]Norman F. Dacey, Dacey on Mutual Funds (New York: Crown Publishers, Inc., 1970), p. 9.

endowments, or cash values resulting from whole life policies. They were built by investments reflecting current earnings, not interest. Investment, whether it be by purchasing real estate, stock or commodities, is a good hedge against inflation.

How Premiums Are Calculated

Insurance is a means of eliminating or reducing the financial burden of untimely deaths by dividing the current losses among many individuals. A simple example involving fire insurance may help illustrate the principle concerning how life insurance premiums are calculated. Of course, there is a big difference between fire insurance and life insurance that must be understood. This difference is that not every house will burn nor is it known which house will burn next, but what is pretty well calculated by the statisticians is approximately how many will burn. Concerning life insurance, it is for certain that everyone will die sometime, the question is--when can one expect a person to die? So it is this matter of uncertainty that provides the main difference between fire insurance and life insurance, but the principle remains the same.

Let it be assumed, that in a certain community, there are 1,000 homes each worth $10,000 and that, judging by past experience, an average of one house will burn each year. Let it be assumed also that each homeowner agrees to contribute $10 per year to a common fund, from which reimbursement will

be made each year to the individual whose house burns. Obviously, then, no individual concerned will lose more than $10, although that much loss is certain if past experience is repeated. The risk, insofar as a major financial loss is concerned, will have been eliminated, because each individual knows that annual fire losses will cost him only $10 plus a charge for the operating expenses involved, even if his house is the one that burns.

The principle illustrated above may be applied to the lives of human beings. From records covering many years and including millions of lives, mortality tables have been prepared showing the number in various age groups dying during any year. During the late 1940's and early 1950's, the life insurance industry developed and approved an up-to-date mortality table known as the Commissioners 1958 Standard Ordinary Mortality Table.[6]

The 1958 CSO Table, presented in Appendix I, is based on ten million live births and follows these through each year of their lives to age ninety-nine. The table has been authorized by all State legislatures, has been adopted for actuarial calculations by many major companies, and became mandatory for all states on January 1, 1966.[7] Referring to Appendix I, it can be seen that for a large group of individuals

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[6]Editorial Staff of the American Institute for Economic Research, Life Insurance from the Buyer's Point of View, Economic Education Bulletin, Vol. XI, No. 6 (Great Barrington, Massachusetts: American Institute of Economic Research, 1971), p. 2.

[7]Ibid.

of a certain age, the theoretical number that will die during any year, can be determined. For example, it is shown in the table that, of the ten million persons originally included, 9,500,118 are still living at their twenty-ninth birthday. Of this number, 19,760 are expected to die before attaining age thirty, and at age ninety-nine only 6,415 of them will still be living.

Let it be assumed that 100,000 people, all twenty-nine years of age, wish to contribute a sufficient amount to a common fund each year so that $1,000 can be paid to the dependents of each member dying during the year. A glance at the table reveals that the death rate at age twenty-nine is 2.08 per thousand, therefore 208 members of the group probably will die during the year. Thus, each of the 100,000 members must contribute $2.08 at the beginning of the year in order to provide $1,000 for the dependents of each of the 208 who probably will die before the end of the year. If the survivors desire to continue the arrangements the following year, each of the remaining 99,792 members alive at the beginning of the next year must contribute $2.13 in order to protect the dependents of the 213 individuals in the group who probably will die during the year. These costs would be slightly higher due to the amount that must be contributed to a contingency reserve or surplus. This surplus consists of the excess of the company's assets over its required reserves and other obligations. It is retained to provide protection against possible asset fluctuation, adverse

mortality fluctuations and other unforeseen contingencies. The cost to the surviving members will, of course, increase each year because the death rate increases as the group grows older. The cost of this arrangement eventually would become prohibitive for the survivors if they continue to need insurance. Therefore, for those who have reason to continue insurance during their later years, some other method of financing the insurance plan is desirable.

The Level Premium Method

The level premium method of payment meets the above requirement. The amount of premium is established when the policy is purchased, and the premium remains constant thereafter. More than the cost of meeting death benefits is paid during the early years of the policy in order to accumulate a "reserve" for the later years. Perhaps the relationships involved will be easier to understand if a specific example is given. Assume that the 10,000 individuals thirty-five years of age are to be insured for $1,000 each for a period of five years. Table 1 has been computed from the CSO Mortality Table in Appendix I.

If the premium is to remain constant throughout the first five year period, more than enough to pay the death claims must be collected during the first two or three years, because the number of deaths increases while the number still living (and paying the premiums) decreases each year. A total of 144 individuals are expected to die during the five year

period, therefore, the benefits paid will be $144,000. During that time, 49,729 premium payments will be made. This is the sum of the number living at the beginning of each year as shown in the second column of Table 1. Therefore, an annual premium of $2.90 ($144,000 divided by 49,729) for each person, would provide funds to pay the beneficiaries of those who died during the five year period. The level premium is higher than the year-to-year premium (actual cost of insurance) for the first three years, which would be $2.51, $2.64 and $2.80, but is lower than such premiums for the last two years, which would be $3.01 and $3.25.

TABLE 1

A COMPUTATION BASED ON THE 1958 CSO MORTALITY TABLE FOR AGES 34 TO 39

Attained Age	Number Living At Beginning Of Year	Number Dying During Year
35	10,000	26
36	9,974	27
37	9,947	28
38	9,919	30
39	9,889	33

Source: Economic Educational Bulletin, Life Insurance From the Buyer's Point of View, (Massachusetts: American Institute for Economic Research), p. 4.

Several other factors are considered when computing premiums. The surplus funds of an insurance company are invested, therefore, the company assumes that the premiums paid will earn an interest return until the funds are paid

as claims. For example, if one assumes from the data presented in Table 1 that the excess funds would earn 3.5 percent interest and that the deaths during each year are evenly distributed throughout the year, the annual net premium would be $2.80 for each person.[8] Also, an allowance for acquisition costs (agent's commission, cost of medical examination, and the expense of initiating the necessary records and issuing the policy) as well as administrative expenses must be paid by the policyholders. These costs would be paid in the form of lower or no cash values in the early years of the contract. However, the basic principles of level premium insurance remain as described.

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[8] Ibid., p. 4.

CHAPTER III

TYPES OF INSURANCE POLICIES MOST COMMON TODAY

Although the basic principles of life insurance are relatively simple, the different types of policies that are issued may be confusing. Many companies seek to attract policyholders by offering apparently new and unusual types of policies, and in some instances an individual may unwisely buy "gadgets" rather than protection. As a result, the insured may collect a varied assortment of policies, purchased from time to time as his sales resistance is lowered or when an agent's call happens to coincide with the arrival of the monthly pay check. The more common types of life insurance and purposes for which each type is best suited are analyzed in this chapter. Basically, there are two types of life insurance, term insurance or term insurance in conjunction with cash values such as whole life.[1]

Principles of Term Insurance

The term insurance policyholder is insured for a certain period only, usually from one to twenty years. Many

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[1]Norman F. Dacey, What's Wrong With Your Life Insurance, (London: Collier-MacMillan Ltd., 1963), p. 142.

companies issue insurance that remains in force until the policyholder reaches a specific age, such as sixty-five or seventy. The premium for term insurance is based on the policyholder's probability of dying during the period that he is to be insured. The insurance is automatically discontinued at the end of the term; and, if the policy is renewed or another term policy issued to replace it, a higher premium is charged because the probability of the policyholder dying during this period is greater due to his increased age.

The reserve accumulated by the insurer for a term policy increases during the earlier years of the policy but diminishes as the end of the term approaches. The amount of the reserve at any time is small, however, because the insurance is to remain in force only for a limited period rather than for the entire lifetime of the insured. Recent legislation in many states provides that policies issued for terms of more than fifteen years or remaining in force beyond the policyholder's sixty-fifth birthday must have cash surrender value if the insurance is discontinued prior to the expiration of the term period.[2] Of course, at the end of the term period, when the insurance is automatically discontinued, the policy has no cash surrender value.

Types of Term Insurance

There are almost as many different forms of term insurance as there are identifiable periods of time following

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[2]Editorial Staff of the American Institute for Economic Research, Life Insurance, p. 6.

the issuance of the policy. Term insurance may be renewable or convertible or both. Renewable term policies include an option permitting the insured to renew the contract for a specified number of term periods or until a specific age without further medical examination. Renewable term insurance may be renewed or discontinued in whole or in part from time to time and also may be converted to another type of insurance without medical examination at the policyholder's option. A convertible policy may, within a stipulated time before the end of the term period, be exchanged for another form of insurance without a medical examination.[3] Term insurance may be issued as a separate policy or as a rider attached to a permanent insurance contract. In either case, the term specified can be identified as level, increasing, or decreasing.

Level Term

The level term insurance provides the same level of protection over the entire period that is to be covered at constantly increasing rates. The most common form of level term insurance is found as a rider attached to a family maintenance policy. This rider is usually part of a basic, permanent policy and provides additional term insurance of a level amount for a specific period of time--most often, twenty years. Permanent or long term protection provided through a renewable term policy may be disadvantageous to

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[3] Ibid.

the policyholder during stable economic conditions. As was mentioned above, the premiums increase at the time of each renewal and when the policyholder attains an advanced age the cost becomes very great. Companies that issue term policies not only limit the number of renewals, but also decline to issue such insurance to individuals who are more than fifty-five years of age.

Increasing Term

The increasing term rider is perhaps the least used form of term insurance. It is always sold as a rider to another contract, never as a separate contract. The amount of insurance, payable in the event of the death of the insured during the term period, rises steadily each year in accordance with a predetermined schedule. The most recent use of an increasing term rider is in policies which promise to pay a death benefit equal to the face of the policy plus the cash value or face of the policy plus all premiums paid if death occurs prior to a certain age.

Decreasing Term

Decreasing term, also called reducing term, consists of a diminishing death benefit at a fixed annual premium.[4] The decrease in coverage takes place over the total term of the policy, typically ten, fifteen, twenty, twenty-five or more years. Because decreasing term is widely used to cover

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[4]The Editors of Consumer Report, Life Insurance, p. 22.

the outstanding balance of the mortgage on a house, the decrease in death benefit usually follows the pattern of mortgage amortization, diminishing very little during the early years and more steeply by later years. But decreasing term insurance has other uses. Starting with the period of life when the family's size and standard of living have become stabilized, insurance needs generally decrease year by year in a pattern resembling that of decreasing term coverage.[5] Then again, the responsibilities of the head of a household may go up unexpectedly--with the birth of a child or an adoption or a divorce and remarriage. Decreasing term may not prove the best coverage then, unless one has remained healthy enough to buy more insurance. This type of term insurance will be discussed more thoroughly in conjunction with investments later in this paper.

Straight Life

The most common type of life insurance is the straight life policy. This policy is sometimes referred to as "whole life" insurance. Whole life insurance can be defined as insurance that may be continued in force throughout the entire lifetime of the policyholder regardless of the method of payment. It includes both straight life and limited payment policies. A straight life policy is a type of whole life insurance for which the policyholder pays premiums for

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[5] Ibid.

as long as he lives or until he discontinues the policy.[6] The term "ordinary" life insurance usually refers to what is called straight life in this paper.

Under the 1958 Commissions Standard Ordinary Mortality Table, premiums for a whole life policy are payable until age ninety-nine. That is the age at which the table runs out and if the insured is still alive at age one hundred, the face amount is payable at that time. The reason for the terminal age is to simplify premium computations; the proportion of insureds surviving past that age is so small that it does not warrant inclusion in the rate structure.[7]

Limited Payment Life

Under the limited payment plan of insurance the policyholder pays premiums only for a stipulated period, usually twenty or thirty years, or until a specified age such as sixty or sixty-five. However, he remains insured under the terms of the contract for life, and the company will pay the face amount of the policy at his death. Because of the shorter premium payment period, a larger annual premium than that for a straight life policy is required. However, the premiums of the limited payment policy cease after the stipulated period, and the insurance remains in force without further payment of premium for the remainder

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[6] Max Schulmacher, personal interview with Travelers Insurance Company's District Manager, Great Falls, Montana, May, 1972.

[7] Ibid.

of the insured's lifetime. The reserve of a limited payment policy accumulated rapidly during the period that premiums are being paid in order that the reserve, together with the interest earned on it, will be sufficient to pay death claims after the policy becomes "paid up". One special advantage of the limited payment policy is that the policyholder makes all the payments for his insurance during his maximum earning years. The drawback is that it would prove costly if death came before or soon after the final premium was paid because higher premiums were paid for the limited life feature.

One special form of the limited payment plan is the single premium policy. In this type of contract the payment period has been reduced to the shortest period possible, that is, one premium payment. There is little to recommend in this policy except that, when one dies, the insured's estate will be reduced by the amount of the premiums paid. Again this could be extremely costly if the insured happened to die in the early years of the contract because the unnecessary advanced premiums paid would not be returned. A more favored single premium plan would be the prepaid policy. The payments are discounted usually at 5 to 5.25 percent for the remaining years to age ninety-nine. One using this plan would have to pay income tax on the amount saved each year in excess of $10 due to the discounting involved. This plan has the advantage of reducing one's estate for tax purposes.

Depending on when the insured died, the face amount of the policy plus all of the unearned premiums would be returned.[8]

Nonforfeiture Provisions

A hundred years ago it was possible for a company to deny anything to the insured if he allowed his policy to lapse. This was commonly called a "forfeiture". However, Elizur Wright, insurance commissioner of Massachusetts, was instrumental in having the first nonforfeiture law enacted in 1861.[9] Since that time, the various states have required companies to maintain policy reserves. The life insurance policy stipulates that the insured owner has the privilege of surrendering his policy and taking the accrued values in one of three ways--cash, extended term insurance, or reduced paid-up insurance. These values are a result of the level premium concept, which involves a higher than necessary charge in the early years in order to accumulate reserves to pay the cost of insurance in later years. When the owner fails to elect an option, the company usually elects the extended term option for him.[10]

Should the owner decide to terminate his policy, he may take the accumulated values in cash. When the insured

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[8]Al Brown, personal interview with Metropolitan Life Insurance District Manager, Great Falls, Montana, May, 1972.

[9]Wilfred R. Kelsey and Arthur C. Daniels, Handbook of Life Insurance (New York: Institute of Life Insurance, 1971), p. 60.

[10]Al Brown, personal interview.

owner elects this option, all his rights under the policy cease and the company has no further responsibility for complying with the contract provisions. A table in the policy indicates the various amounts of cash available at selected intervals after the date of issue. The major disadvantage of this option is the fact that reinstatement is not permitted once the option is exercised.

If the owner decides to discontinue premium payments but does not wish to terminate the insurance, he may elect to use his cash value to purchase term insurance. This is the extended term insurance option which means that the cash value is used as a net single premium to purchase term insurance of the same face amount of the original policy for as long a period of time as such cash value will purchase. The decision on the part of the owner to elect this option will be based on his need for protection versus his desire to have immediate cash.

The third option permits the insured to use the cash value as a net single premium to purchase a paid-up policy of the same type for a reduced face amount at net rates. This option has a great deal of value to an insured who does not need the protection of the basic policy but wishes to continue insurance in force and cease paying premiums. It is also possible for the insured to reinstate the original policy, with proof of insurability, up to five years, provided the insured pays all the back premiums plus interest.

Types of Companies and Their Respective Policies

There are two basic types of life insurance companies, stock and mutual companies. A stock company is owned by stockholders who finance the operations and who assume the risks and responsibilities of ownership and management. Most stock companies issue only nonparticipating policies; a few also issue participating policies; a very few issue participating policies only.

A mutual company has no stockholders. Its management is directed by a board elected by the policyholders for whose benefit the company is operated. Nearly all mutual companies issue only participating policies; a few issue policies on a nonparticipating basis, the owners of such policies having no voice in the management.

For a participating policy, the premium rate is fixed at an amount somewhat greater than the company expects will be needed under normal conditions to pay for the cost of providing insurance. The policyholder receives a refund, in the form of a dividend, based on the actual operating experience together with an estimate of future cost trends. Specifically, the dividend represents the portion of the participating premiums not needed for the following purposes, (1) to be set aside for present and future benefit payments to policyholders and beneficiaries (known as the reserve), (2) to be set aside for possible contingencies (known as the surplus fund), and

(3) to meet the operating expenses of the company.[11] A dividend is usually available after premiums for the first two or three years have been paid, and is generally paid annually thereafter.

Deducting this yearly dividend from the regular gross premium gives the policyholder his yearly net cost. Thus, the cost of a participating policy reflects the operating results of the company from which it is purchased. Under a participating policy, the policyholder has the guarantee that he will never be called to pay more than the premium rate specified in the policy. But the net cost of a participating policy cannot be guaranteed in advance since it depends upon actual operating expenses from year to year.

In a nonparticipating policy, the premium rate is fixed at an amount which represents as closely as possible what the company expects will be needed to pay for the cost of providing the insurance, and no dividend is payable. This premium rate then becomes the cost to the policyholder. Thus, the actual cost of a nonparticipating policy is guaranteed in advance for the life of the policy. When a life insurance policy is purchased, there is no way of foretelling whether a participating or nonparticipating policy will be lower in the long run.

Dividend Options

The typical participating life insurance policy permits the owner of the policy to select, from among a number

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[11]Kelsey and Daniels, Handbook of Life Insurance, p. 18.

of options, the disposition of dividends apportioned to his policy contract. The owner may elect a dividend option at the time the policy is issued and is permitted to change his selection at any time. There are five dividend options available by purchasing a whole life policy: (1) payment in cash, (2) reduction of premium, (3) accumulation of dividends at interest, (4) paid-up additions, and (5) one year term insurance.[12]

When the policyholder wishes his dividends to be paid in cash, the insurer mails a check for the amount on the premium anniversary date. There is very little to recommend in this option if the policy is not paid-up since the insured must then make out a check for the full premium due. The owner may elect to apply dividends toward payment of the next premium. The owner will then send a check for the difference between the amount of the dividend and the gross premium due. When the policyholder elects to leave dividends with the company, and he dies, he receives the face amount of the policy plus the accumulated dividends. In 1970, most insurance companies guaranteed 2.5 or 3 percent interest on accumulated dividends but were paying from 4.4 to 4.75 percent.[13] When the policyholder uses his dividends to buy additional amounts of insurance, the dividend is used as a net single premium to buy more insurance of the same type as the basic policy. These paid-up additions are also participating and

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[12]Hammond and Williams, Life Insurance, pp. 56-58.

[13]The Editors of Consumer Report, Life Insurance, p. 20.

their dividends can be used to buy more paid-up additions. The additions have cash surrender values and may be surrendered for cash at any time without affecting the basic policy. The newest dividend option, known as the fifth option, is to apply dividends to purchase one-year term insurance equal to the cash values. New York Life Insurance Company uses this option as a selling point to refute the idea that one has to lose his cash values when he dies.[14] Of course, one should realize that he is paying an extra premium with his dividends in order not to lose his cash values when he dies.

Special Riders to the Policy

Life insurance companies typically permit the owner of the policy to add additional features to expand the coverage of the basic policy. Two of the more popular features are: (1) waiver-of-premium, and (2) accidental death benefit. These features would require an additional premium and additional underwriting factors.

The waiver-of-premium provision waives all future premiums in the event the insured becomes totally and permanently disabled prior to a limiting age, usually to age sixty. Total disability means that the insured must be unable to perform any work for gain or profit. Permanent disability is assumed if such disability continues for a period of six

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[14]William O'Grady, personal interview with a New York Life Insurance agent, Great Falls, Montana, April, 1972.

months.[15] Thus, the waiver-of-premium benefit does not become effective until six months after the onset of the disability. In the event that the insured recovers from the disability, he must resume the premium payments.

Accidental death benefit, commonly referred to as double indemnity, provides that a multiple of the face amount is payable if the death is caused by accidental means. The typical clause defines death from accidental means as "resulting from bodily injury effected solely through external, violent, and accidental means independently and exclusively of all other causes and within ninety days after such injury."[16] These special riders are available on all types of insurance whether it be whole life or term.

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[15]Lorne Ferguson, personal interview with a Mutual of Omaha Life Insurance agent, Great Falls, Montana, May, 1972. This company is the only one (according to this research) which would pay waiver-of-premium after four months.

[16]Hammond and Williams, Life Insurance, pp. 66-67.

CHAPTER IV

CONTROVERSIAL ISSUES OF LIFE INSURANCE

Now that the basic policies and provisions have been explained, a thorough look at some of the controversial issues concerning cash value life insurance are presented. Ordinary life, straight life, permanent insurance, and whole life insurance are all names for the same type of insurance that has been under constant observation and scrutiny for over a hundred years in the United States. Many books have been written about life insurance, both pro and con, which confuse as much as they enlighten. Some controversial issues concerning life insurance are dealt with objectively below and may help clear up some confusing areas.

Cash Surrender Values

There are many misconceptions about the subject of cash values, and these have yielded much controversy. Life insurance agents, when making a sale, point out that when one buys a whole life policy, he is getting a savings account along with his insurance protection. Actually, cash values should not be considered as an investment or savings account, but as an emergency fund. They are part of the total life insurance contract, not one part of a two-part contract

made up of savings and protection. This fact is self-evident when $4,000 cash value is borrowed from a $10,000 ordinary life contract--all the beneficiary receives is $6,000, not $10,000.[1]

Cash values are an emergency fund because this money is available to one only upon request. It has been used many times due to financial upsets in family finances. Though life insurance is not designed as a way of preparing to meet these financial difficulties, it has helped tide over millions of families at various points of their lives.[2]

"Permanent" life insurance has a policy loan provision, under which one may borrow any amount up to his cash value of the policy, usually at an interest rate of 4 to 6 percent.[3] This leads to one of the all-time favorite charges of anti-life insurance books--why one has to pay interest on his own money. It was made clear above that level premium life insurance is impossible in the absence of the accumulation of reserves. Joseph M. Beth, Professor of Life Insurance, at Indiana University, has written this about paying interest on borrowed cash values:

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[1]Second Vice President Earwaker, Managed Communications System: Life Insurance Marketing, (Hartford, Connecticut: Travelers Insurance Co., 1972), p. 3.

[2]1971 Life Insurance Fact Book (New York: Institute of Life Insurance, 1970), p. 49.

[3]Editorial Staff of the American Institute for Research, Life Insurance, p. 5.

> The company assumes that it will earn interest when it computes premiums, reserves, cash values, and the like. It therefore must invest the income it receives so that it will indeed earn interest. When it lends money to a business enterprise, or to a governmental unit, or to a homeowner, it must collect interest. Likewise, if it lends money to a policyholder, it must collect interest if it is to meet its obligations.[4]

Clearly then, if a life insurance company loaned money without charging interest, regardless of who the borrower is, it could not function as efficiently. Its premiums, computed on the assumption that interest would be earned on its reserves, would be inadequate, and the whole structure would collapse.

Whole Life Versus Term

Research for this paper has involved interviewing many life insurance agents selling in Great Falls, Montana. Agents from mutual companies and stock companies alike had one thing in common--they could each prove, in their own way, that a whole life policy in the long run would be much cheaper than a term policy. The mutual companies had used detailed illustrations proving their point by the use of projected dividends to lower the premiums. Mr. Harold W. Baird, executive from Northwestern Mutual Life Insurance, working out of Milwaukee, had written literature proving that a nonparticipating whole life policy over a long period would be

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[4]Halsey D. Josephson, The Tired Tirade: The Answer to Anti-Life Insurance Books (Valley Stream, New York: Farnsworth Publishing Co., Inc., 1968), pp. 19-20.

less expensive than a level term policy. To be as objective as possible he decided to make the comparison with a non-participating whole life policy issued by the same company as that issuing level death benefit term policy--Hartford Life.

Mr. Baird compared a $100,000 "split life" yearly renewable term insurance policy with a $100,000 "executive" whole life, non-participating policy. Paid up at 95, the "split life" package consisted of a non-participating retirement annuity, requiring a premium of $1,000, the ownership of which entitled the buyer to have $100,000 of level coverage yearly renewable term insurance to age ninety-five, at steadily increasing annual premiums.[5] The ownership of this annuity on a premium paying basis enables the buyer to have this admittedly unusual level term policy, renewable through age ninety-four, and at presumably preferential rates.

Baird used the "present value of future premiums" method in comparing the two policies. A different way of expressing this method would be to find out how much money there would have to be in a fund, at the starting age of the insurance program, and invested at whatever net-after-taxes rate is assumed, to pay all premiums as they fall due, and with the fund completely exhausted with the payment of the final premium at age ninety-four. Mr. Baird assumed 4 percent to be the net-after-taxes interest.

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[5]Kelsey and Daniels point out in Handbook of Life Insurance, p. 20, that most term policies are limited to a certain number of renewals, or the policy may not be renewed after age sixty-five.

In Appendix II, Mr. Baird computed the present value of future premiums for the $100,000 "split life" yearly renewable term insurance, and the net premiums for the "executive whole life" policy.[6] Both policies were computed at age thirty-five and forty-five, and run to age ninety-five. The results are indicated that it would take a fund of $68,081.84 at age thirty-five, and $96,959.31 at age forty-five for the yearly renewable term policy. It would take $42,492.88 at age thirty-five, and $59,987.50 at age forty-five for the executive whole life policy. In fact then, the whole life policy was from $25,000 to almost $37,000 less than for the term policy.

The way Mr. Baird compared the whole life and term insurance syndrome only dramatized its complexity. It is certainly unrealistic to assume that anyone would buy both an annuity and term insurance to get the same coverage as a whole life contract. Actually, under the "split life" concept, the insured would be purchasing a $1,000 retirement annuity with a renewable term rider. The dividends from the annuity were used to help pay for the term insurance to age ninety-five.

After having studied Mr. Baird's comparison of how whole life insurance would be cheaper in the long run than term, it seemed necessary to write a letter and question him

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[6]Harold W. Baird, "The Truth, The Whole Truth, and Nothing But The Truth," Field News (April, 1972), pp. 4-5.

about it. This was the reply:

> The subject of your paper has been attempted by many persons, and for more than a century. There is a very simple answer to which is better, term (with or without side fund investments) or whole life. Term is unquestionably better for those (fortunate enough or unfortunate enough, depending on the point of view) who die within the early years. Whole life is demonstrably better for those who live for an extended period of time unless the individual is much better than the average investor.[7]

Mr. Baird's comments are well taken, but as will be shown later in this paper, one doesn't have to be the "better than average" investor if he just remembers to invest the difference.

Traditional Net Cost Method

One of the favorite arguments used by the anti-life insurance authors, Norman F. Dacey and G. Scott Reynolds, to mention two, concerns net cost computations of whole life insurance. These men state that the traditional net cost computations do not take into account the "interest lost" on the premiums paid. The traditional net cost method is very popular as a selling aide for life insurance agents, especially those who work for a mutual company, for they can use the projected dividends to make the premiums seem very low or even free. Below, in Table 2, it is shown how the traditional net cost method was used by a stock company.[8]

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[7]Letter from Harold W. Baird, Executive Assistant for Northwestern Life Insurance, Milwaukee, June 27, 1972.

[8]G. Scott Reynolds, The Mortality Merchants (New York: David McKay Company, Inc., 1968), p. 122.

TABLE 2

TRADITIONAL NET COST METHOD FOR A STOCK COMPANY

Total premiums paid (20 years times $200)	$4,000
Cash surrender value (after 20 years)	$3,000
"Net cost" of insurance for 20 years	$1,000

$1,000 divided by 20 years = $50.00 per year
$50 per year for $10,000 = $ 5.00 per $1,000

In this example, a $10,000 "permanent" policy with an annual premium of $200 had been in force for twenty years. At the end of the twenty year period the cash surrender value was $3,000. Has the insurance cost $200 a year? According to the figures of a typical stock insurance company, it has only cost the policyholder $50 per year. In Table 3 it is shown how the traditional net cost method could be used by a mutual insurance company issuing dividends to lower the premiums.

TABLE 3

TRADITIONAL NET COST METHOD FOR A MUTUAL COMPANY

Total premiums paid (20 years times $250)	$5,000
Cash surrender value	$3,000
Difference between premiums paid and "savings" accumulated	$2,000
"Dividends" paid over 20-year period (not guaranteed, but estimated)	$2,000
"Net cost" of insurance for 20 years	0

SOURCE: G. Scott Reynolds, The Mortality Merchants (New York: David McKay Company, Inc., 1968), p. 123.

In the above example, a $10,000 "permanent" policy, with an annual premium of $250, after twenty years, showed how an agent could legally "prove" that the insurance would be free. These were hypothetical examples but, nevertheless show a realistic picture.

The traditional net cost method used by life insurance agents is an overly simplified procedure to find the "true" cost of life insurance. The agents are forgetting at least one important element--the time value of money. It is a little absurd to assume, as depicted in Table 2 and Table 3, that after twenty years one could have had insurance for such a low cost or even more unbelievable--for no cost. The American Institute for Economic Research is not in favor of the traditional net cost method, but what they call the interest adjusted cost method.

Interest Adjusted Cost Method

The interest adjusted cost method suggests that interest should be added on the annual premium payments, on the theory that, "if one were not putting his money into insurance he could be investing it elsewhere, in a savings bank for instance; hence it should be compounded at a reasonable net-after-taxes rate in arriving at the true cost."[9] An example is provided which shows the interest adjusted cost method as applied to the policy to obtain the actual cost of the policy. This example is noted below in Table 4.

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[9]Baird, Field News, pp. 9-10.

TABLE 4

INTEREST ADJUSTED COST METHOD FOR A STOCK COMPANY

Total premiums paid over 20-year period	$4,000
Compound interest at 4 percent lost by policyholder on the annual average increase of $150 on the cash surrender value for 20 years	$1,467
Total gross cost for 20 years	$5,467
Cash surrender value	$3,000
"Net cost" of insurance for 20 years	$2,467

In Table 4, the policyholder, if at the end of twenty years, chose to cash in his policy, he would receive the $3,000 cash surrender value. Subtracting this from the total cost, we find that the interest adjusted cost was $2,467, not $1,000 as would be believed under traditional net cost method.[10]

Is Interest Adjusted Cost Applicable Only To Life Insurance?

These are logical attempts at trying to obtain the actual cost of life insurance, but it is doubted whether the traditional net cost method was ever intended to show the actual cost of life insurance, but only the relative cost of differences between companies based on generally comparable contracts. The criticism that "cost" does not include

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[10]Reynolds, Merchants, p. 127.

interest could be made about the cost of anything else that a person buys.[11] The real question then is whether life insurance is the only thing, which if not bought, but instead the money was invested in a savings bank, we should adjust the cost by adding the interest.

To prove that money invested, even in a savings account, could have an opportunity cost, assume as in Appendix III, that one deposits $1,000 a year, over a ten year period, at 5 percent simple interest. A quick glance and one might assume that the depositor has made a gain of $3,207 over the ten year period. But a closer look and one can see that when taxes are added to the interest earned each year quite a different picture is presented. Mr. Baird has assumed that the vast majority of people who actually save $1,000 a year in a savings bank, are at least in the 30 percent tax bracket.

Presented below in Table 5, the traditional net cost method is applied to the 5 percent savings bank analogy, but this time figuring in the depositor's taxes, he has not made the huge gain that was shown in Appendix III. By using the traditional net cost method, and assuming the saver is in the 30 percent tax bracket, the $3,207 would be reduced to $2,244.90.[12]

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[11]Harold W. Baird, Abuses in the Replacement of Life Insurance, Nebraska Law Review, Vol. XLVIII, No. 4. (Nebraska: University of Nebraska, 1969), pp. 933-34.

[12]Baird, Field News, p. 13.

TABLE 5

TRADITIONAL NET COST METHOD APPLIED TO FIVE PERCENT SAVINGS BANK ANALOGY

	Omitting Federal Income Tax	Adjusted for 30% Income Tax
Amount in Savings Account at end of ten years	$13,207.00	$13,207.00
Less annual deposits only	10,000.00	
Less annual deposits and income taxes paid		10,962.10
Net Gain	$ 3,207.00	$ 2,244.90

SOURCE: Harold W. Baird, Field News, (April, 1972), p. 13.

Now if Table 5 is carried further and the interest adjusted cost method is applied to the savings account, one can see an even more drastic reduction as noted in Appendix IV. In Appendix IV, it is assumed that the depositor is in the 30 percent tax bracket and that he could have invested his money at 4 percent net-after-taxes, if he chose. Instead of a net gain of $3,207.00 or $2,244.90, the depositor has had a net loss of $361.41. It may seem a little ridiculous that in a simple transaction like saving $1,000 a year in a savings bank for ten years, one has the results portrayed all the way from an illustrated gain of $3,207 (ignoring income taxes), to a cost of $361.41 under the interest adjusted cost method. This is a spread of $3,568.41 in describing gain or cost on the identical transaction.

The purpose of this last section involving the traditional net cost and the interest adjusted cost method in computing the cost of life insurance, is to show the inadequacies in both methods. It ranges from the overly simple to the ridiculous. The interest adjusted method began to receive much attention after the report of the Joint Special Committee on Life Insurance Costs was released to the American Life Convention, Institute of Life Insurance, and the Life Insurance Association of America. To better understand the inadequacy or inappropriateness of the method, the following quotation from the Joint Committee Report might be helpful:

> From the outset, our committee realized that although no completely satisfactory method has been advanced or is likely to be, a practical improvement over the traditional method is achievable.[13]

The point is, that whenever one is approached with either of these two methods by an insurance agent, he should be familiar with the short-comings of each. There is one thing for sure about the interest adjusted cost method, it will always produce a cost, even for saving money in a savings bank. It should be realized that the "value of money" or the "alternate use of money" concept is implicit in every financial transaction a person makes, whether it involves the borrowing of money to buy a car, the saving of money in a savings bank, or even in the purchasing of term or whole life insurance. Another point that must be realized about the theory of net cost, is that an attempt is made to compute

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[13]Earwaker, Life Insurance Marketing, p. 2.

the cost of insurance only on the condition that the insured survives the time period involved. It does not take into consideration that the insured may die earlier than expected and the cash value would be forfeited. In that case, the net cost would be a completely different matter.

The Use of Present Value to Find the True Cost of Life Insurance

To obtain a more accurate picture of the cost of life insurance, the present value of an annuity should be used. These computations are prefigured and are available in table form. These computations take into consideration inflation rates, and determine how much future payments are worth in today's money. In all the computations that follow concerning the net worth of premiums, it is assumed that the interest rate is 4 percent for a period of twenty years. It is shown below how the present value of an annuity is applied to the traditional net cost method. The interest factor is found to be 13.59.[14]

$$An = R \times IF$$
$$An = \$200 \times 13.59$$
$$An = \$2,718$$

It is now necessary to obtain the present value of the cash surrender value. As shown below, .377 is the interest factor used to determine the present value of $3,000 payable in twenty years, discounted at 4 percent.

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[14]Weston and Brigham, Managerial Finance, pp. 818-821.

$$P = V\ (IF)$$
$$P = \$3,000\ (.377)$$
$$P = \$1,131$$

Using both the present value of an annuity and the present value of a dollar, it can be calculated that the true cost for a typical stock company would be $1,587 as indicated below in Table 6.

TABLE 6

NET COST OF A STOCK COMPANY APPLYING PRESENT VALUE METHODS

Present value of an Annuity for an annual $200 premium after 20 years	$2,718
Minus the present value of the C.S.V.	1,131
Net cost of a stock company applying present value methods	$1,587

This figure is $587 more than the traditional net cost method without using present value. When present value is applied to the premiums of a typical mutual company, it is found that in order to obtain "free" insurance, the dividends would have to be substantially more than under the traditional net cost method. Of course, this amount of money can never be guaranteed. Shown below is the present value of an annuity for an annual $250 premium after twenty years, as applied to a typical mutual company. Again the interest factor is 13.59.

$$An = R \times IF$$
$$An = \$250 \times 13.59$$
$$An = \$3,397.50$$

This amount minus the present value of the cash surrender value that was calculated previously amounts to a net cost of $2,266.50. This is the amount the dividends must be in order to obtain "free" insurance as mutual companies claim. The calculations are presented below in Table 7.

TABLE 7

NET COST OF A MUTUAL COMPANY APPLYING PRESENT VALUE METHODS

Present value of an annuity for an annual $250 premium after 20 years	$3,397.50
Minus the present value of the C.S.V.	1,131.00
Net cost of a mutual company applying present value methods	$2,266.50

The interest adjusted cost method that was explained previously has given a truer cost figure than the traditional net figure. If present value is applied to the interest adjusted cost method, the most realistic picture of the cost of life insurance should be obtained. This is presented below in Table 8, with the interest factor at 13.59, discounted at four percent for twenty years. The stock company example will be used because of the certainty of the premium.

So it has been shown that by using present value techniques, the cost of insurance has been calculated to be more expensive than either the traditional net cost or the interest adjusted cost methods. By using present value, along with interest adjusted costs, the "true" cost of life insurance can actually be achieved.

TABLE 8

NET COST OF THE INTEREST ADJUSTED COST USING PRESENT VALUE FOR A STOCK COMPANY

Present value of an annuity for an annual $200 premium after 20 years	$2,718
Compound interest at 4% lost by policyholder on the annual average increase of $150 on the C.S.V. for 20 years	$1,467
Total gross cost for 20 years	$4,185
Minus the present value of the C.S.V.	$1,131
Net cost of the interest adjusted cost using present value	$3,054

Obtaining the Difference After Becoming Disabled

As noted previously, both whole life and term insurance may have a waiver-of-premium clause included. One controversy points out another problem--if the term policyholder becomes disabled, the insurance is automatically paid by the insurance company, but where does the money come from to invest, that is, "the difference"?

There are at least three ways available to protect one's income in case of disability. The insured could be covered under one or a combination of all three of the following plans, social security, workmen's compensation, and a wage protection plan.

Social Security Benefits

The most popular way to help make up the difference in premiums, that may be lost due to disability, is through

social security benefits. For a worker and his family to get monthly cash payments because of disability, a certain amount of credit for work must be earned under social security. This credit may have been earned at any time after 1936. Most non-farm employees get credit for one quarter year of work if they are paid fifty dollars or more in a three month calendar year. Also, a person may receive a full year of credit if his self-employment net income is $400 or more in a year. In addition, any employee who earns the maximum wages creditable for social security for a year ($9,000 for 1972 and later) receives a full year of credit, even if the worker is employed only part of the year.[15] Having credit for sufficient work means only that certain kinds of benefits may be payable, it does not determine the amount. The amount will be dependent on the worker's average earnings covered by social security. The maximum family payment for a disabled worker, a wife under sixty-five, and one child with a F.I.C.A. taxable income of $9,000 amounts to $620.40.[16]

Workmen's Compensation

The policyholder may also be employed on a job that is covered by the workmen's compensation legislation. This legislation prescribes a monthly benefit payable to a worker

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[15] Ibid.

[16] Grayce Keller, personal interview with a Social Security receptionist, Great Falls, Montana, June 1972.

who has become disabled because of an accident which occurred in the course of and arising out of employment.[17] The laws also contain provisions for the payment of medical expenses connected with an injury, apart from any income received because of disability. Income payments for disability are usually paid weekly in amounts approximately two-thirds of the average weekly wages at the time the injury occurred. This figure is subject to a weekly maximum and may also be subject to limits on the duration of payments and the total amount payable. Because of these limitations, workmen's compensation payments alone would prove to be inadequate for providing the difference to invest.

Wage Protection Plan

The third possible way to protect one's income upon becoming disabled would be the purchase of a wage protection plan from an insurance company. If one does not feel that either social security or the workmen's compensation or both provides enough to cover the difference for the investments that would otherwise have been made, this plan may be appropriate. Wage protection can be compared to an annuity providing a fixed income for the life of the insured, but in this case, the insured receives the payments upon proof of disability.

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[17] Hammond and Williams, Essentials of Life Insurance, p. 151.

A Package Policy - Insurance Plus Investments

One insurance company, whose representative was interviewed, American Western, combines the monies collected from the insured for term insurance and mutual funds into a single premium. If the insured becomes disabled, the waiver of premium clause provides the payments needed for both the term insurance and the investment in mutual funds.

The decision to buy a particular policy is very subjective, it certainly depends upon what the person wants and thinks about the policy. If a person is not adequately covered under any or all plans, and if considered "accident prone", it may be advisable to buy a limited life policy to age sixty-five and to forget about investing the difference in premiums. If more money is needed than that supplied by the above plans, the permanent policy can be cashed in for the cash surrender values, providing a fixed income for specified number of years. It seems reasonable to assume that any income coming into the house after becoming disabled would be better put to use for necessities and amenities than using the limited amount of income for investments.

If a person could forecast an accident that would cause disability, the optimum decision would be to purchase a term policy with a waiver of premium clause, plus the purchase of a wage protection plan one month before becoming disabled. But, of course, this is not possible and it is this great mystery of the unknown or future expectations

that makes the decision of which policy to buy, very subjective. This being the case, the most practical policy to buy would be the combination of term insurance plus mutual funds, as offered by American Western. The waiver of premium clause would cover both the insurance and the investments and there would be no need to worry where the difference would come from.

CHAPTER V

INTERVIEWS WITH LIFE INSURANCE AGENTS SELLING POLICIES IN GREAT FALLS, MONTANA

During the months of April, May and June of 1972, extensive interviews were made to gain a better understanding of life insurance and to obtain various points of view concerning many policies and controversies. The following information consists of the impressions of the experiences that were obtained by interviewing life insurance agents. A listing of the mutual and stock life insurance companies and their agents is included in Appendix V.

Dealing With The Agent

It seems as though the agent has been trained by masters in the art of salesmanship, and everything that might be at all distasteful to a prospective buyer has been eliminated insofar as that has been possible. He has been given actuarial knowledge, including a vocabulary that one may not understand. Skilled mathematicians have devised means for comparing his policies advantageously with those of almost any other company. He is convinced that what he is doing is in the best interest of the prospective buyer. His convictions ordinarily are believed to be sincere, but

this does not necessarily imply that they are correct. Finally, he is receiving fairly high pay for selling insurance. His commissions reward him well for persuading one to buy or retain an insurance policy, especially a "permanent" policy. New York insurance laws which most large insurance companies abide by, restrict the agents commission to 55 percent of the first year's premium. The agents, though, can actually acquire 100 percent. The agents can get 5 percent of the first year's premium, for the next nine years by keeping the insurance in force for that long. Obviously, however good his intentions may be, the agent is hardly a disinterested party.

The Type of Policy Favored Most by Agents

After all the interviews, in which the main question was which type of insurance plan the agent thought would be the best possible (keeping in mind the purpose of life insurance), only one out of the eleven agents recommended term with the difference invested. This agent represents the American Western Life Insurance Company, which is a stock company, operating out of Salt Lake City. American Western's agent advised buying a decreasing term policy to age sixty-five and investing the difference in mutual funds. The idea being, that as one gets older his insurance needs should lessen if he has invested well all through the years.[1]

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[1]Carl D. Heishman, personal interview with an American Western agent, Great Falls, Montana, April, 1972.

The opinions of the other ten life insurance agents, from both mutual and stock companies, were unanimously in favor of a whole life policy. Their comments generally went along the line that if one happened to know he would die in the early years of contract, then term insurance would certainly be superior to whole life. Also the general agreement was that the odds were against one dying within the years of the contract, then at age sixty-five he would be without insurance. When the fact was brought to their attention that decreasing term insurance could give the same amount of protection or more at a lower cost, they all got out their pencils and paper to show how net cost effected their particular policy. One agent had a very good point. He stated, "Yes, it is very well and good to buy term and invest the difference, but will the people really invest the difference? If, by chance, they do invest the difference, will he be able to save the profits to age sixty-five?"[2] These questions are well taken but it is not the purpose of this paper to persuade people to invest the difference or to accumulate the profits for a time when the money would be best spent. It is the purpose to take a truly objective look at the several types of policies available and determine which would be the best if handled correctly. The next chapter deals specifically with comparison of whole life and decreasing term insurance with the difference invested in various ways.

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[2]James M. Miller, a personal interview with a State Farm Insurance agent, Great Falls, Montana, May, 1972.

CHAPTER VI

WHOLE LIFE VERSUS TERM WITH THE DIFFERENCE INVESTED

In an overwhelming majority of families, the need is not insurance beyond retirement but adequate retirement income. Social security benefits alone are not enough in most cases. Some couples can count on a company pension or a veteran's pension for the rest of their needs. But it is safe to say that, for a typical couple, any comforts beyond bare subsistence in old age, even in this era of Medicare and other rising social benefits, will depend on the amount of money they are able to put aside before their retirement.[1] A "cash value" or whole life insurance policy is certainly one way of saving up for old age. The pertinent question then is--whether the amount of money put into the whole life policy could be used more effectively if it were spent on lower premium term and the difference were invested in some way.

Difference Invested in a Savings Bank

For purposes of comparison, suppose two men wanted to save for retirement while at the same time provide their families an estate of at least $50,000. Suppose both men

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[1]Editors of Consumer Report, Life Insurance, pp. 72-3.

devoted the same amount of money needed to pay for a $50,000 whole life policy, however, only one man actually bought that policy. The other bought a $50,000 five year renewable term policy, and in addition, either invested the difference in a savings account or in a mutual fund. It was also assumed that both the men were twenty-five years of age and the premiums were those for policies issued in 1971 by the Connecticut General Life Insurance Company.[2] Rather than compare participating policies, selected non-participating policies were used because the policyholder's annual cash outlay was fixed and guaranteed by the insurance contract. Comparisons involving participating policies are unreliable, their annual premiums are considerably higher and although dividends reduce the net outlay over the years, outlay will be subject to fluctuations in the dividends.

It has been shown in Appendix V that the insurance estate of the whole life policyholder remains at $50,000 for as long as he keeps paying his premiums. But the estate of the man with five year term insurance starts going above $50,000 as soon as he pays his first year's premium and deposits his savings at interest, or he invests in securities at net 6 percent, (see Appendix VII). To keep the two estates close to equal, the term policyholder must reduce the size of his policy periodically. This is something that every policyholder has the unquestioned right to do in his contract.

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[2] Ibid., p. 73.

The policyholder reduces his insurance coverage every fifth year to the point where the insurance plus his accumulated savings bring his total estate down to about $50,000 again. For the sake of simplicity, it is assumed the insurance reduces in steps of $1,000.

The crucial factor in the comparison is the assumed return on investment of the term policyholder's savings. How much would savings have to earn, in other words, to keep up with or surpass the cash values in the whole life policy? The first assumption is that the money will return 4 percent annually after taxes. Money deposited in federally insured savings certificates or U.S. Savings Bonds would earn at least that much after taxes on the income of most American families if those savings instruments paid, over a prolonged period, 5.5 to 6 percent interest, as they did in the late 1960's and early 1970's.[3] Obviously, those rates are not guaranteed, a sharp reversal of economic conditions could depress them below 4 percent. Nevertheless, that may be a rather stable figure viewed against long-term monetary prospects. The comparison is between net savings after taxes and insurance cash values growing tax free. Eventually, the cash values of the policy will exceed the total premiums paid in and that excess is taxable when the policy is cashed in. Thus, the net cash value of the whole life policy in its later years may be somewhat less than is shown in the

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[3] Ibid., p. 74.

comparison. How much less would depend on the policyholder's tax bracket in the year he withdrew the fund and on whether he decided to take the cash value or convert it to a life-time annuity. As can be noted in Appendix VI, the policy-holder would have a total estate of $56,308 at age sixty-four, but at age sixty-five, the insurance portion of his package drops and he has a total estate of only $33,308.

Difference Invested at Equivalent Of Net Six Percent

As another basis for comparison, assume the term policyholder's estate recalculated on the assumption that the savings earn a net annual return of 6 percent, (see Appendix VII). An investor with that objective might have to risk putting a sizable part of his savings into the stock market or some other speculative venture, perhaps real estate. Some people who take the risk are eminently successful; others lose a substantial amount. In recent years, however, high grade corporate bonds have been available at long-term yields up to 9 percent and triple-A-rated tax exempt municipal bonds at yields of 6 percent and higher.[4] For a skillful yet conservative investor, then, a net return of 6 percent is a reasonable target, although no one can be sure how the money market or the stock market will behave in the future.

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[4]Charles C. Abernathy, Jr., a personal interview with a D. A. Davidson & Co., stockbroker, Great Falls, Montana, June, 1972.

With his savings growing at 6 percent per year, the term policyholder in the comparison could cut down on his insurance much more rapidly than at a 4 percent rate of return. In Appendix VII, one can note that at age sixty-one, the insurance portion of the contract drops and he continues to invest in this example to age sixty-five, whereby the policyholder would then have accumulated a total estate of $66,516.

It is not the price difference between policies that matters most in deciding whether to buy whole life or term insurance. Of first importance is for each family to have all the insurance protection it feels it needs. Not many families, however, can afford all they need at the premium rates for cash value policies.

Difference Invested Based On Actual Results Of Forty-Nine Mutual Funds

It has been shown that buying decreasing term and investing the difference at 6 percent net would actually be superior to buying a whole life policy, but now actual historical figures based on investing the difference into mutual funds has been used. An average of forty-nine mutual funds has been used to get a more representative picture of the world of mutual funds.

It was assumed that a male aged forty, purchased a $75,000 nonparticipating whole life policy with a premium waiver clause for disability. It required an annual premium

of $1,701.75 and has a guaranteed cash value of $35,175 at age sixty-five. The purchase of $100,000 nonparticipating, decreasing term to age seventy, policy with an annual premium of $432.50, with a waiver of premium and no cash value at age sixty-five, was considered also. The rates were those of Bankers Security Life of New York. The premium saving, or the "difference" was $1,269.25.[5]

An assumed annual investment of $1,269.25 for twenty-five years from 1944 to 1968, using the average of forty-nine mutual funds is presented in Appendix VIII. Again a participating policy is not used because of the uncertainty of premiums from different companies. As can be seen in Appendix VIII, and in Figures 1 and 2 in Appendix IX, both the living estate and the death estate would have provided one with more income if the individual had bought decreasing term and invested the difference in mutual funds. It is noted that this is an average of forty-nine mutual funds, comprised of both "no load" and "load" funds. If one would have invested the difference in the poorest performing fund listed, which was the Scudder, Stevens, and Clark Balanced Fund, one would have produced a liquidation value of $96,950. If one were fortunate enough to have invested in Keystone S-4, which was the best performing fund listed, the liquidating value would have been $375,515.[6] The former is a no load fund

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[5]Dacey, Mutual Funds, p. 137.

[6]Ibid., p. 138.

whereas the latter was a load fund. As can be noted the load fund did much better than the no load fund but that is not always the case.

Load Versus No-Load Funds

It is necessary to compare the long term performance of the average load mutual fund (8.5 percent) to a no-load fund which attaches no fee to share purchases. The performance of both types of funds is noted during stock market breaks or sharp declines such as occurred in 1962, 1966, and 1969-70, which made the decade of the 1960's the worst ten-year span for investors in a full quarter century.[7] The Growth Fund Research, Incorporated, of Long Beach, California, has made an exhaustive study of the data and has put together a hypothetical average $10,000 load and no-load fund from 1949 through 1970. In its performance figures, the research organization did not include reinvestment of capital gains or dividends, the performance results are unvarnished. These are the findings:

> 1) Both funds came out way ahead in the twenty-one years, emphasizing a basic lesson: if treated as a long-term investment, the mutual fund is an excellent vehicle.
>
> 2) Over the long-term since 1950, the no-load funds have clearly demonstrated performance superiority. One reason lies in the fact that they have no sales charge, for the $850 saved on the original $10,000 purchase twenty-one years ago, grew in the Growth Fund Research compilation to more than $8,000. Also a higher proportion of no-load funds are

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[7]Sylvia Porter, Great Falls Tribune, July 7, 1971, p. 17.

> oriented toward growth, and despite the market breaks of the 1960's, the twenty-one years was a period of spectacular average economic growth.
>
> 3) During market declines, both load and no-load funds lose value too. In the 1962 break, the funds on the average lost 12 to 13 percent;
>
> 4) While a $10,000 savings account paying five percent compounded annually would have more than doubled--from $10,000 to $27,859, there is simply no comparison.[8]

The comparisons of the load and no-load funds from 1949 to 1970 has been noted in Appendix X. After a twenty-one year period, the load fund had a liquidation value of $70,502, whereas the no-load fund had a liquidation value of $96,246. In the stock market performance, the past is a poor predictor of the future but it seems to be the only criteria that can be used. It would be a mistake for anyone to limit his choice of mutual funds though, to those that make no sales charge. Pay whatever is required to obtain the best results. Remember, although on the average no-load funds perform better than load funds, the absence of a selling commission will not make up for a mediocre performance record.

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[8] Ibid.

CHAPTER VII

CONCLUSIONS

When it comes time for one to buy life insurance, one will basically have to choose either some sort of whole life policy or a term policy. Either one of these policies is acceptable, although selection would depend upon the individual involved and what he would like his insurance policy to provide for him. If one should choose a whole life policy a few suggestions may be of value.

The double indemnity provision has been an excellent selling point for the agent. This provision for paying twice the face amount of a policy if the insured's death is due to an accident or injury, costs only a small amount in proportion to the total premium. Accidental death benefits, however, are not cheap because one's chances of dying in the exact manner necessary for the beneficiary to collect the double payment are small.[1] Obviously the needs of the dependents after one's death will not be determined by the manner in which one may die. For the persons who can afford sufficient insurance, accidental death benefits are unnecessary. For the person who cannot afford all the insurance protection his family

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[1]The Editorial Staff, Life Insurance, p. 24.

needs, the extra premium payments required for double indemnity provisions can be better applied toward the purchase of additional insurance.

Waiver-of-premium provisions may sometimes be desirable. Again, this provision should not be purchased if the cost of doing so will reduce the amount of life insurance one can afford to carry below that required to provide for the minimum needs of one's dependents.

A person looking for insurance may choose to purchase a level term policy. The use of a renewable term insurance in order to provide for a long-term or permanent responsibility may be disadvantageous. As was mentioned previously, and shown by Mr. Baird's comparison of whole life and renewable term insurance, the premiums increase at the time of each renewal, and when the policyholder attains an advanced age, the cost becomes very great. It is recommended in this paper that the prospective policyholder buy a decreasing term policy to age sixty-five and invest the difference in mutual funds. It is also recommended, all other things being equal, that the mutual funds be of a no-load nature. The idea behind this plan is that as one grows older, he should not need as much insurance if he had invested well during his productive lifetime. As was noted in Appendix VI, if the policyholder had invested the difference in a savings account netting 4 percent after taxes, he would be left with only $33,308, instead of $50,000 worth of insurance at age sixty-five. The order of preference noted in this paper coincidentally correlates with the ease of access of the money involved.

The first preference would be to buy a decreasing term policy to age sixty-five and to invest the difference in reputable mutual funds, as noted above. For convenience, one insurance company such as American Western, could combine the purchase of decreasing term insurance plus investing the difference in mutual funds of one's own choice. It has the advantage of having the difference automatically invested for the policyholder, but with the disadvantage of purchasing load mutual funds with the added sales charge. If the insurer wished, a double indemnity and waiver-of-premium clause could also be added.

The second preference would be to buy a limited whole life policy to age sixty-five. Access to this is limited to the cash value and dividends if any. If the policy were purchased at age twenty-five, the policyholder would be covered for his lifetime, but his payments would stop just about the time he probably would retire. If one could afford the initial higher premiums, he might consider purchasing insurance from a mutual company, issuing participating policies. The extra money used to pay for the participating policies, would eventually come back to the policyholder in the form of dividends. It must be remembered though, that the dividends are only estimates of future returns, so even though the money would come back, no one could guarantee any specific amount in any particular time span. Inflation and rising taxes might have an adverse effect upon the company, and the dividends might not be what were expected.

To buy decreasing term insurance to age sixty-five and to invest the difference in a savings account would be the third and last choice offered as an insurance plan to satisfy the basic purpose of life insurance. This third choice seems to give the policyholder the greatest degree of access to his money. It has been noted that if the policyholder isn't forced to save by having to pay for premiums that accumulate cash values, or by buying a term policy and having the convenience of an insurance company invest the difference automatically, savings do not accumulate to an appreciable amount. The average saver seems to save to a point where he is eager to spend a good portion of it--whether it be spent to buy a new car or to just keep up with the Joneses.[2]

These three choices certainly do not exhaust all the possible kinds of insurance policies available, but they do represent the best overall opportunities, in order of priority, to satisfy the general purpose of life insurance. It should be evident that if the preferred plan of buying decreasing term insurance with the difference invested in mutual funds is to be successful, one must be sure to invest the difference or have the difference automatically invested for him. If the policyholder were only going to invest spasmodically, that is, when he decided that he did not need the extra money for other purposes, he would be far better off purchasing a whole life policy.

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[2]Jim Jackson, a personal interview with an All State Insurance agent, Great Falls, Montana, May, 1972.

There is an underlying reason for all the controversies dealing with life insurance that is concerned with the life expectancy of human beings. One can only be certain of eventual death--when it will occur remains a mystery. If it were known, determining the best type of insurance would be a very simple task. It would seem that the best policy to buy if the above information were known would be term insurance purchased just prior to one's death. Because of this uncertainty the market is almost overburdened with various and sundry life insurance policies.

APPENDIX I

COMMISSIONERS 1958 STANDARD ORDINARY MORTALITY TABLE

Age	Number living Beginning of Year	Number dying During the Year	Death Rate Per 1,000
0	10,000,000	70,800	7.08
1	9,929,200	17,475	1.08
2	9,911,725	15,066	1.52
3	9,896,659	14,449	1.46
4	9,882,210	13,835	1.40
5	9,868,375	13,322	1.35
6	9,855,053	12,812	1.30
7	9,842,241	12,401	1.26
8	9,829,840	12,091	1.23
9	9,817,749	11,879	1.21
10	9,805,870	11,865	1.21
11	9,794,005	12,047	1.23
12	9,781,958	12,325	1.26
13	9,769,633	12,896	1.32
14	9,756,737	13,562	1.39
15	9,743,175	14,225	1.46
16	9,728,950	14,983	1.54
17	9,713,967	15,737	1.62
18	9,698,230	16,390	1.69
19	9,681,840	16,846	1.74
20	9,664,994	17,300	1.79
21	9,647,694	17,655	1.83
22	9,630,039	17,912	1.86
23	9,612,127	18,167	1.89

APPENDIX I--Continued

Age	Number living Beginning of Year	Number dying During the Year	Death Rate Per 1,000
24	9,593,960	18,324	1.91
25	9,575,636	18,481	1.93
26	9,557,155	18,732	1.96
27	9,538,423	18,981	1.99
28	9,519,442	19,324	2.03
29	9,500,118	19,760	2.08
30	9,480,358	20,193	2.13
31	9,460,165	20,718	2.19
32	9,439,447	21,239	2.25
33	9,418,208	21,850	2.32
34	9,396,358	22,551	2.40
35	9,373,807	23,528	2.51
36	9,350,279	24,685	2.64
37	9,325,594	26,112	2.80
38	9,299,482	27,991	3.01
39	9,271,491	30,132	3.25
40	9,241,359	32,622	3.53
41	9,208,737	35,362	3.84
42	9,173,375	38,253	4.17
43	9,135,122	41,382	4.53
44	9,093,740	44,741	4.92
45	9,048,999	48,412	5.35
46	9,000,587	52,473	5.83
47	8,948,114	56,910	6.36
48	8,891,204	61,794	6.95
49	8,829,410	67,104	7.60
50	8,762,306	72,902	8.32
51	8,689,404	79,160	9.11
52	8,610,244	85,758	9.96
53	8,524,486	92,832	10.89
54	8,431,654	100,337	11.90

APPENDIX I--Continued

Age	Number living Beginning of Year	Number dying During the Year	Death Rate Per 1,000
55	8,331,317	108,307	13.00
56	8,223,010	116,849	14.21
57	8,106,161	125,970	15.54
58	7,980,191	135,663	17.00
59	7,844,528	145,830	18.59
60	7,698,698	156,592	20.34
61	7,542,106	167,736	22.24
62	7,374,370	179,271	24.31
63	7,195,099	191,174	26.57
64	7,033,925	203,394	29.04
65	6,800,531	215,917	31.75
66	6,584,614	228,749	34.74
67	6,355,865	241,777	38.04
68	6,114,088	254,835	41.68
69	5,859,253	267,241	45.61
70	5,592,012	278,426	49.79
71	5,313,586	287,731	54.15
72	5,025,855	294,766	58.65
73	4,731,089	299,289	63.26
74	4,431,800	301,894	68.12
75	4,129,906	303,011	73.37
76	3,826,895	303,014	79.18
77	3,523,881	301,997	85.70
78	3,221,884	299,829	93.06
79	2,922,055	295,683	101.19
80	2,626,372	288,848	109.98
81	2,337,524	278,983	119.35
82	2,058,541	265,902	129.17
83	1,792,639	249,858	139.38
84	1,542,781	231,433	150.01
85	1,311,348	211,311	161.14

APPENDIX I--Continued

Age	Number living Beginning of Year	Number dying During the Year	Death Rate Per 1,000
86	1,100,037	190,108	172.82
87	909,929	168,455	185.13
88	741,474	146,997	198.25
89	594,477	126,303	212.46
90	468,174	106,809	228.14
91	361,365	88,813	245.77
92	272,552	72,480	265.93
93	200,072	57,881	289.30
94	142,191	45,026	316.66
95	97,165	34,128	351.25
96	63,037	25,250	400.56
97	37,787	18,456	488.42
98	19,331	12,916	668.15
99	6,415	6,415	1,000.00

SOURCE: The Editorial Staff, Life Insurance, p. 2.

APPENDIX II

Hartford Life—$100,000 "Split Life" Yearly Renewable Term Insurance
Computation of Present Value of Future Premiums—4% Discount Rate

Age	Premium	Yrs.	Discount Factor	Discounted Value Year's Premium	Cumulative Discounted Value of Premiums	Cumulative Disc. Premiums, Starting at Age 45
94	$30,083	49	.1463	$4,401.14	$ 4,401.14	$96,959.31
93	27,484	48	.1522	4,183.06	8,584.20	92,558.17
92	25,263	47	.1583	3,999.13	12,583.33	88,375.11
91	23,348	46	.1646	3,843.08	16,426.41	84,375.98
90	21,673	45	.1712	3,710.42	20,136.83	80,532.90
89	20,184	44	.1780	3,592.75	23,729.58	76,822.48
88	18,834	43	.1852	3,488.06	27,217.64	73,229.73
87	17,587	42	.1926	3,387.26	30,604.90	69,741.67
86	16,418	41	.2003	3,288.53	33,843.43	66,354.41
85	15,308	40	.2083	3,188.66	37,082.09	63,065.88
84	14,251	39	.2166	3,086.77	40,168.86	59,877.22
83	13,241	38	.2253	2,983.20	43,152.06	56,790.45
82	12,271	37	.2343	2,875.10	46,027.16	53,807.25
81	11,338	36	.2437	2,763.07	48,790.23	50,932.15
80	10,448	35	.2534	2,647.52	51,437.75	48,169.08
79	9,613	34	.2636	2,533.99	53,971.74	45,521.56
78	8,841	33	.2741	2,423.32	56,395.06	42,987.57
77	8,142	32	.2851	2,321.28	58,716.34	40,564.25
76	7,522	31	.2965	2,230.27	60,946.61	38,242.97
75	6,970	30	.3083	2,148.85	63,095.46	36,012.70
74	6,471	29	.3207	2,075.25	65,170.71	33,863.85
73	6,010	28	.3335	2,004.34	67,175.05	31,788.60
72	5,572	27	.3468	1,932.37	69,107.42	29,784.26
71	5,144	26	.3607	1,855.44	70,962.86	27,851.89
70	4,730	25	.3751	1,774.22	72,737.08	25,996.45
69	4,333	24	.3901	1,690.30	74,427.38	24,222.23
68	3,960	23	.4057	1,606.57	76,033.95	22,531.93
67	3,614	22	.4220	1,525.11	77,559.06	20,925.36
66	3,300	21	.4388	1,448.04	79,007.10	19,400.25
65	3,016	20	.4564	1,376.50	80,383.60	17,952.21
64	2,759	19	.4746	1,309.42	81,693.02	16,575.71
63	2,524	18	.4936	1,245.85	82,938.87	15,266.29
62	2,309	17	.5134	1,185.44	84,124.31	14,020.44
61	2,113	16	.5339	1,128.13	85,252.44	12,835.00
60	1,915	15	.5553	1,063.40	86,315.84	11,706.87
59	1,746	14	.5775	1,008.32	87,324.16	10,643.47
58	1,591	13	.6006	955.55	88,279.71	9,635.15
57	1,450	12	.6246	905.67	89,185.38	8,679.60
56	1,322	11	.6496	858.77	90,044.15	7,773.93
55	1,205	10	.6756	814.10	90,858.25	6,915.16
54	1,099	9	.7026	772.16	91,630.41	6,101.06
53	1,002	8	.7307	732.16	92,362.57	5,328.90
52	913	7	.7599	693.79	93,056.36	4,596.74
51	831	6	.7903	656.74	93,713.10	3,902.95
50	756	5	.8219	621.36	94,334.46	3,246.21
49	686	4	.8548	586.39	94,920.85	2,624.85
48	623	3	.8890	553.85	95,474.70	2,038.46
47	565	2	.9246	522.40	95,997.10	1,484.61
46	514	1	.9615	494.21	96,491.31	962.21
45	468	0	1.0000	468.00	96,959.31	468.00

To Compute Discounted Value at Age 35, Discount Above Figure for 10 Years, at Factor of .6756 = 65,505.71 and Add 10 Years of Discounted Premiums

44	427	9	.7026	300.01	65,805.72	
43	392	8	.7307	286.43	66,092.15	
42	362	7	.7599	275.08	66,367.23	
41	336	6	.7903	265.54	66,632.77	
40	312	5	.8219	256.43	66,889.20	
39	292	4	.8548	249.60	67,138.80	
38	273	3	.8890	242.70	67,381.50	
37	256	2	.9246	236.70	67,618.20	
36	243	1	.9615	233.64	67,851.84	
35	230	0	1.0000	230.00	68,081.84	

vs. $100,000 Executive Whole Life (L95) Non Participating
Ages 35 and 45, Male

Executive Whole Life (L95) Non Participating $2,685. Age 45	Cumulative			Executive Whole Life (L95) Non Participating—Ave. Prem. $1,806. Age 35	Cumulative
$ 392.82	$59,987.50	$264.22	59	$ 178.51	$42,492.88
408.66	59,594.68	274.87	58	185.70	42,314.37
425.04	59,186.02	285.89	57	193.15	42,128.67
441.95	58,760.98	297.27	56	200.84	41,935.52
459.67	58,319.03	309.19	55	208.89	41,734.68
477.93	57,859.36	321.47	54	217.19	41,525.79
497.26	57,381.43	334.47	53	225.97	41,308.60
517.13	56,884.17	347.84	52	235.00	41,082.63
537.81	56,367.04	361.74	51	244.39	40,847.63
559.29	55,829.23	376.19	50	254.15	40,603.24
581.57	55,269.94		49	264.22	40,349.09
604.93	54,688.37		48	274.87	40,084.87
629.10	54,083.44		47	285.89	39,810.00
654.33	53,454.34		46	297.27	39,524.11
680.38	52,800.01		45	309.19	39,226.84
707.77	52,119.63		44	321.47	38,917.65
735.96	51,411.86		43	334.47	38,596.18
765.49	50,675.90		42	347.84	38,261.71
796.10	49,910.41		41	361.74	37,913.87
827.79	49,114.31		40	376.19	37,552.13
861.08	48,286.52		39	391.18	37,175.94
895.45	47,425.44		38	406.89	36,784.76
931.16	46,529.99		37	423.15	36,377.87
968.48	45,598.83		36	440.12	35,954.72
1,007.14	44,630.35		35	457.64	35,514.60
1,047.42	43,623.21		34	476.06	35,056.96
1,089.30	42,575.79		33	495.02	34,580.90
1,133.07	41,486.49		32	514.89	34,085.88
1,178.18	40,353.42		31	535.48	33,570.99
1,225.43	39,175.24		30	556.79	33,035.51
1,274.30	37,949.81		29	579.18	32,478.72
1,325.32	36,675.51		28	602.30	31,899.54
1,378.48	35,350.19		27	626.32	31,297.24
1,433.52	33,971.71		26	651.42	30,670.92
1,490.98	32,538.19		25	677.43	30,019.50
1,550.59	31,047.21		24	704.52	29,342.07
1,612.61	29,496.62		23	732.69	28,637.55
1,677.05	27,884.01		22	762.13	27,904.86
1,744.18	26,206.96		21	792.47	27,142.73
1,813.99	24,462.78		20	824.26	26,350.26
1,886.48	22,648.79		19	857.13	25,526.00
1,961.93	20,762.31		18	891.44	24,668.87
2,040.33	18,800.38		17	927.20	23,777.43
2,121.96	16,760.05		16	964.22	22,850.23
2,206.80	14,638.09		15	1,002.87	21,886.01
2,295.14	12,431.29		14	1,042.97	20,883.14
2,386.97	10,136.15		13	1,084.68	19,840.17
2,482.55	7,749.18		12	1,128.03	18,755.49
2,581.63	5,266.63		11	1,173.18	17,627.46
2,685.00	2,685.00		10	1,220.13	16,454.28
			9	1,268.90	15,234.15
			8	1,319.64	13,965.25
			7	1,372.38	12,645.61
			6	1,427.28	11,273.23
			5	1,484.35	9,845.95
			4	1,543.77	8,361.60
			3	1,605.53	6,817.83
			2	1,669.83	5,212.30
			1	1,736.47	3,542.47
			0	1,806.00	1,806.00

SOURCE: Field News, April 12, 1972, p. 5.

APPENDIX III

GROWTH OF $1,000 PER YEAR AT FIVE PERCENT INTEREST

Year	Deposit At Beginning Of Year	Interest Credited For Year	Amount In Account At End Of Year
1	$1,000	$ 50	$ 1,050
2	1,000	103	2,153
3	1,000	158	3,310
4	1,000	216	4,526
5	1,000	276	5,802
6	1,000	340	7,142
7	1,000	407	8,549
8	1,000	477	10,027
9	1,000	551	11,578
10	1,000	629	13,207

SOURCE: Baird, Field News, p. 13.

APPENDIX IV

TAXES PLUS INTEREST VERSUS A SAVINGS ACCOUNT

Age	Deposit At Beginning Of Year	Income Tax Paid On Previous Year's Interest	Actual Outlay Compounded at Four Percent		Five Percent Interest Credited For Year	Amount In Account At End of Year
			First of Year	End of Year		
1	$1,000	$ 00.00	$ 1,000.00	$ 1,040.00	$ 50.00	$ 1,050
2	1,000	15.00	2,055.00	2,137.00	103.00	2,153
3	1,000	30.90	3,168.10	3,294.82	158.00	3,310
4	1,000	47.40	4,342.22	4,515.91	216.00	4,526
5	1,000	64.80	5,581.71	5,804.98	276.00	5,802
6	1,000	82.80	6,887.78	7,163.29	340.00	7,142
7	1,000	102.00	8,265.29	8,595.90	407.00	8,549
8	1,000	122.10	9,718.00	10,106.72	477.00	10,027
9	1,000	143.10	11,249.82	11,699.81	551.00	11,578
10	1,000	165.30	12,865.11	13,379.71	629.00	13,207
		188.70	13,568.41			
		962.10				

SOURCE: Baird, Field News, p. 15.

Note: In Summary, the Interest Adjusted Cost is:

Actual Outlay, Accumulated at 4 percent	$13,568.41
Less, Savings Account Balance	13,207.00
Interest Adjusted Cost	$ 361.41

APPENDIX V

LIST OF LIFE INSURANCE COMPANIES INTERVIEWED

Mutual Companies with Agents

Metropolitan Life - Al Brown

New York Life - William O'Grady

Mutual of Omaha - Lorne Ferguson

Northwestern Mutual Life - Richard Hepp and William Louden

Prudential Life - Earl Rynerson

Stock Companies with Agents

American Western - Carl Heishman

All State - Jim Jackson

Occidental Life - Jack Turner

State Farm - James M. Miller

Travelers - Max Schumacher

Other Interviews

Social Security Receptionist - Grayce Keller

D. A. Davidson Stock Broker - Charles C. Abernathy, Jr.

APPENDIX VI

$50,000 ESTATE FROM TERM INSURANCE PLUS SAVINGS AT FOUR PERCENT NET
(Annual outlay of $623.50 starting at age 25)

Age	Face Amount Of Five-Year Renewable Term Insurance	Annual Premium	Annual Saving	TOTAL ESTATE (Insurance plus accumulated savings) Year One	Year Five
25-29	$50,000	$195.00	$428.50	$50,429	$52,414
30-34	48,000	184.64	438.86	50,853	53,410
35-39	45,000	213.05	410.45	50,820	53,896
40-44	41,000	254.11	369.39	50,265	53,907
45-49	37,000	324.88	298.62	50,205	54,390
50-54	33,000	414.68	208.82	50,598	55,339
55-59	28,000	519.80	103.70	50,443	55,771
60-64	23,000	708.62	(85.12)*	50,686	56,308
65	---	---	---	33,308 (all savings)	

SOURCE: The Editors of Consumers Report, Life Insurance, p. 76.

*Premium for term insurance during this five years exceeds the $623.50 annual outlay contemplated. The deficit of $85.12 per year is covered with interest earned by the separate savings account.

APPENDIX VII

$50,000 ESTATE FROM TERM INSURANCE PLUS SIX PERCENT INVESTMENT
(Annual outlay of $623.50 starting at age 25)

Age	Face Amount Of Five-Year Renewable Term Insurance	Annual Premium	Annual Investment In Securities	TOTAL ESTATE (Insurance plus investments) Year One	Year Five
25-29	$50,000	$195.00	$428.50	$50,429	$52,560
30-34	47,000	181.21	442.29	50,003	53,068
35-39	44,000	208.76	414.74	50,483	54,598
40-44	40,000	248.40	375.10	50,973	56,421
45-49	34,000	300.16	323.34	50,744	57,903
50-54	26,000	330.96	292.54	50,195	59,730
55-59	16,000	305.60	317.90	50,048	63,030
60	3,000	109.82	513.68	50,544	53,396
61-64	---	---	623.50	54,081	66,516
65	---	---	---	66,516 (all investments)	

SOURCE: The Editors of Consumers Report, Life Insurance, p. 77.

APPENDIX VIII

AVERAGE OF ALL 49 FUNDS

LIVING ESTATE			DEATH ESTATE			
"Buying Term and Investing the Difference"	Buying Whole Life	AGE	"Buying Term and Investing the Difference"			Buying Whole Life
TOTAL VALUE OF SHARES	CASH VALUE		TOTAL VALUE OF SHARES	+ DECREASING TERM INSURANCE	= TOTAL DEATH ESTATE	FACE VALUE
* $ 1,354	$ 0	41	$ 1,354	$100,000	$101,354	$75,000
3,529	225	42	3,529	95,000	98,529	75,000
4,380	1,575	43	4,380	90,000	94,380	75,000
5,500	3,000	44	5,500	85,000	90,500	75,000
6,659	4,425	45	6,659	80,000	86,659	75,000
9,161	5,925	46	9,161	75,000	84,161	75,000
12,793	7,425	47	12,793	70,000	82,793	75,000
16,217	8,925	48	16,217	65,000	81,217	75,000
19,392	10,425	49	19,392	60,000	79,392	75,000
20,547	11,925	50	20,547	55,000	75,547	75,000
31,589	13,500	51	31,589	50,000	81,589	75,000
39,072	15,000	52	39,072	46,250	85,322	75,000
43,874	16,575	53	43,874	42,500	86,374	75,000
40,151	18,150	54	40,151	38,750	78,901	75,000
57,925	19,725	55	57,925	35,000	92,925	75,000
65,000	21,300	56	65,000	31,250	96,250	75,000
68,826	22,950	57	68,826	28,750	97,576	75,000
87,329	24,525	58	87,329	26,250	113,579	75,000
78,192	26,100	59	78,192	23,750	101,942	75,000
93,384	27,750	60	93,384	21,250	114,634	75,000
108,814	29,250	61	108,814	18,750	126,764	75,000
128,361	30,750	62	128,361	17,500	145,861	75,000
122,567	32,175	63	122,567	16,250	138,817	75,000
158,458	33,675	64	158,458	15,000	173,458	75,000
180,955	35,175	65	180,955	14,400	195,355	75,000

Whether you **lived** or **died**
you would have been better off
"Buying Term and Investing the Difference"

SOURCE: Dacey, Mutual Funds, p. 238.

APPENDIX IX

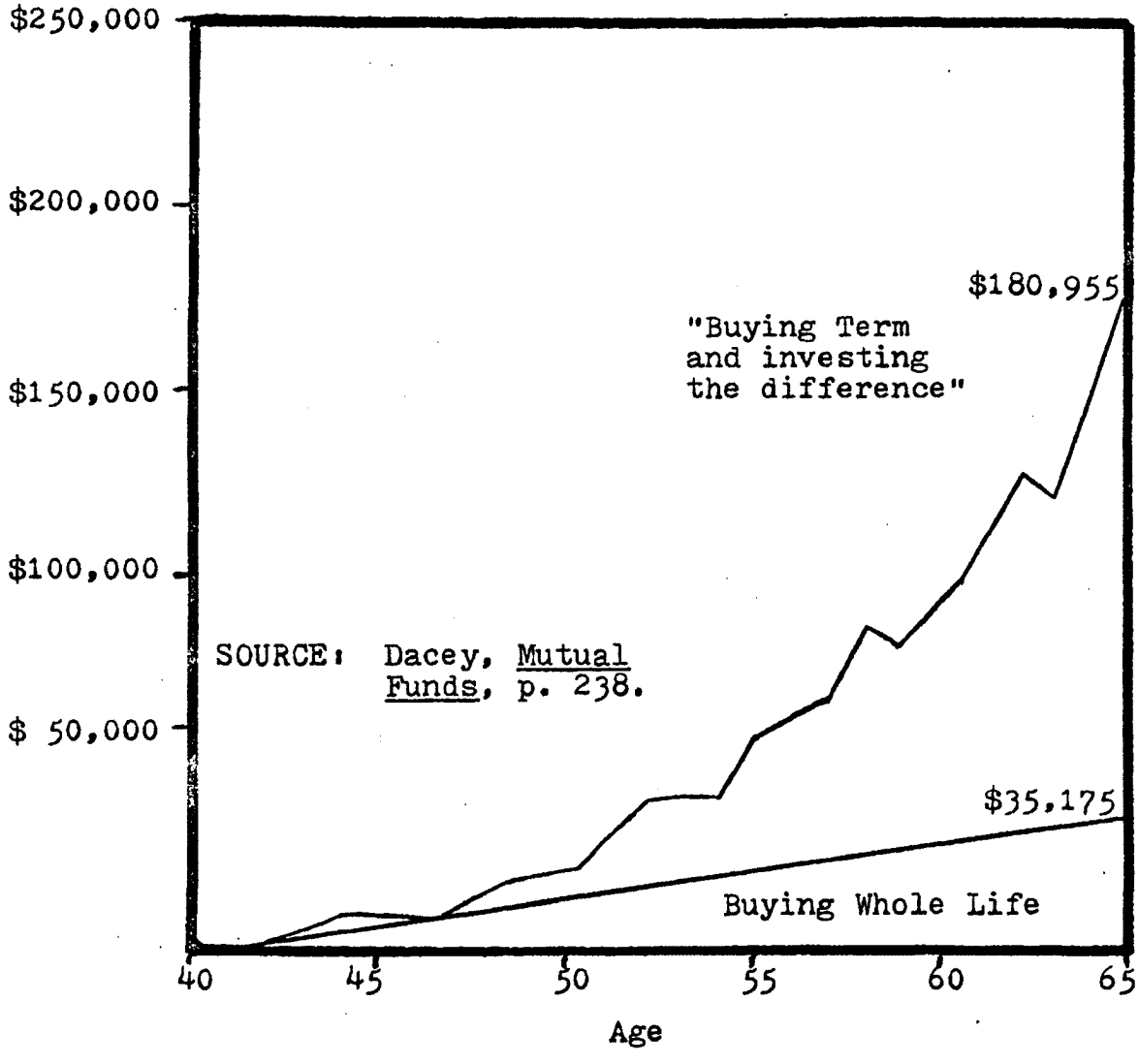

Fig. 1.--Living Estate

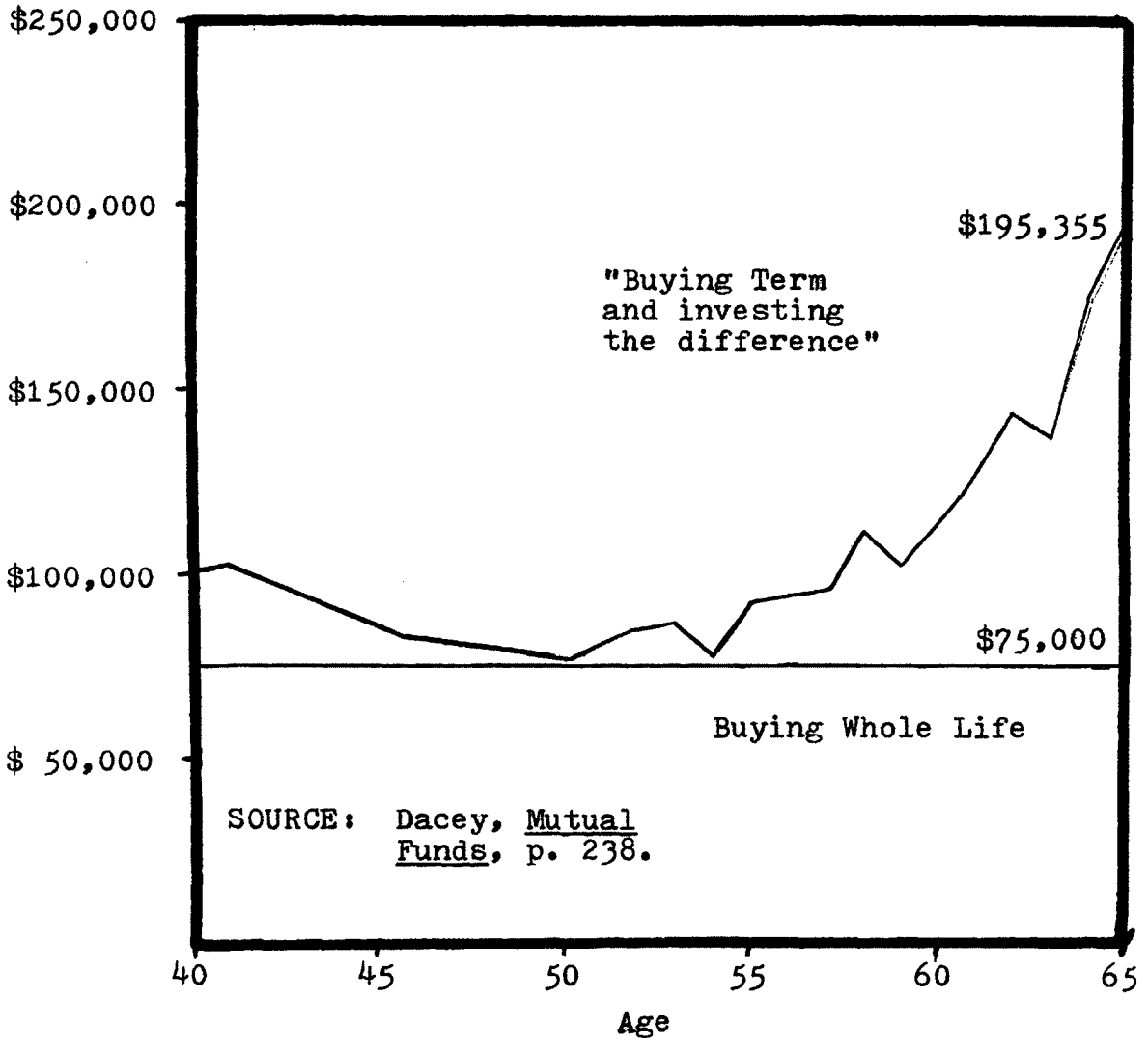

Fig. 2.--Death Estate

APPENDIX X

LOAD FUND COMPARED TO NO-LOAD FUND

Date December 31	Load Fund	No-Load Fund
1949	$ 9,150	$ 10,000
1950	11,172	12,040
1951	12,713	14,149
1952	14,099	14,149
1953	14,106	15,828
1954	19,876	22,476
1955	23,255	26,634
1956	24,813	28,978
1957	22,381	26,863
1958	30,797	37,340
1959	34,154	42,605
1960	35,274	44,224
1961	44,376	55,058
1962	39,051	47,515
1963	45,963	56,303
1964	52,030	63,457
1965	63,008	77,417
1966	59,606	75,172
1967	80,706	100,731
1968	94,023	123,194
1969	80,390	107,179
1970	70,502	96,246

SOURCE: Sylvia Porter, Great Falls Tribune, July 7, 1971 p. 17.

APPENDIX XI

PERSONAL NOTE

It has been found that the public is unaware of the purposes and ways life insurance may be used. It is true that life insurance is universally known as a necessity, mentioned to us by our parents or friends, but the concept of it should be more exposed. Because of this lack of familiarity with life insurance, it is usually sold and not voluntarily bought.

This may sound obvious, but it is worth mentioning; people should not buy life insurance until they really need it. After much research into the subject of life insurance and realizing that the purpose of life insurance is to at least partially reduce the financial burden of death for one's dependents, I relinquished my policy. It is my reasoning that as long as I am single, with no dependents, I should not need much life insurance. I do have a $15,000 term policy with the Government because the premiums are so extraordinarily low. The argument used by life insurance agents to buy a policy while one is young because it is cheaper is not true at all. It is not cheaper, the payments are just spread out over a longer period. The one real

advantage of buying life insurance while young and without dependents would be that one does not run the risk of becoming uninsurable later on in life.

The first time many people seriously come in contact with life insurance is when called by an agent or visited at his home. A single person may be induced to buy a policy he may not even need, or a married individual (with or without children), may be persuaded to buy a policy that is either inadequate or unsuited to his needs. It is the recommendation of this study that more schools--both high schools and colleges offer a course in life insurance and estate planning. If this is accomplished, it would be a big step toward a better understanding of the esoteric subject of life insurance.

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