Determining the Amount of Life Insurance

A. Defining "Need"

There are many ways to estimate an individual's need for life insurance and we have, so far, explored a few of the more common "rule of thumb" approaches that result in broad generalizations. It is important to understand that each individual or family unit has potentially unique needs that can affect the amount of life insurance needed.

A thorough fact finding interview with the client will help the agent to better understand the current financial situation of the applicant as well as future needs. Like any estimating process, the more complete and accurate the input, the more comprehensive the estimate will be. Many consumers see the value of such an approach and are willing to participate by providing the information necessary to complete an accurate needs analysis.

Many insurance companies provide a computer-based needs analysis and quoting process for the agent to use in determining the face amount and structure of a life insurance program for a proposed insured. These programs vary in detail, but the end goal is always to help the agent and consumer quantify the need and make informed decisions.

In many situations, it may be advisable to purchase term insurance to provide the base layer of life insurance protection when the needs are the greatest and add a significantly smaller layer of cash value life insurance. This strategy will provide a much larger face amount of death benefit when the need for protection is the greatest. As the insured ages and the term renewal rates become more expensive, they can reduce the term protection and keep the lower face cash value product. Cash value policies are part insurance and part cash accumulation. Cash value premiums are higher than with a term policy for the same death benefit. In return, part of the premium accumulates tax-deferred. The money that accumulates in the policy – the cash value – allows future premiums to remain level.

Although there are rules of thumb to follow in estimating a person's insurance need, they are very simplistic and often do not consider factors such as the family's current net worth or the ages of the family members. Such rules of thumb normally utilize a multiple of earnings approach.

One such rule is to estimate the amount of life insurance by multiplying the wage earner's income by a factor of 6 to 8. So, an individual earning $100,000 annually should have $600,000 to $800,000 of life insurance. A similar rule takes immediate cash needs into account. The rule is 5 times gross income, plus mortgage, debts, final expenses, and other special funding needs. Assume that the same individual has a

mortgage of $300,000, college debts of $100,000, and he or she desires college funding requirements for his or her children, totaling $200,000. The insurance need in this case could easily rise to $1,100,000.

These guidelines can provide a wide range of solutions. Without looking at a family's entire financial profile, it is difficult – if not impossible – to accurately determine the proper amount of life insurance. The most reliable approach to determining the proper level of insurance is with a needs analysis. This type of analysis determines the amount of money needed to support the family and pay down outstanding liabilities, reduced by current asset holdings and future receipts of income.

The first category of need is often the most underestimated or neglected: the current cash need upon death. This category of need only exists when determining the life insurance need, since disability insurance is focused on income replacement. By including debt liquidation and education funding in this category, the insured leaves the family with a roof over their heads and ensures that the children will be able to attend college.

The second category is the estimated income need for the family. This amount will be different depending on whether the needs analysis is being performed for life or disability insurance. For life insurance, the income need is determined by estimating the surviving spouse's annual income requirements over his or her remaining life expectancy. This amount will typically range from two-thirds to three-quarters of the family's current income.

Once this amount is estimated, an assumption must be made regarding an **inflation percentage.** This is the amount by which the income requirement must grow each year. A second assumption must be made regarding after-tax earnings. The difference between the after-tax earnings rate and the inflation factor is the percentage that is applied to the income need in order to determine the present value of the income need. This amount represents the capital which must be set aside now to ensure that the surviving spouse receives the annual income each year for the rest of his or her life.

When calculating the income need, it is important to factor the children's income needs into the equation. Often, this need will be determined through a certain age, usually 18 or 21. This calculation must be performed for both life and disability insurance needs analyses. The income need may be reduced by an assumed amount of earnings by the spouse. However, it is common for people to disregard this amount in order to prepare for a worst-case scenario, where one spouse dies or becomes disabled and the other is unable to work.

Part of the total current cash and income needs are satisfied by the capital assets owned by the family. This will typically include cash, savings, and other liquid investment assets. Life insurance should provide sufficient death benefits to prevent the survivors having to draw down on current capital assets to meet living expenses. This does not include the value of assets that will not be sold in order to generate cash, such as the family home. The capital assets will also include the present value of any pension or other retirement benefits that will become available at some point in the future.

It is also important to factor in the present value of benefits that will be received from the Social Security Administration. Upon death, the children of the decedent may be entitled to a monthly check until they reach age 18. The surviving spouse will typically

begin to receive survivor benefits upon reaching age 60 and when they reach retirement age they will begin to receive Social Security retirement benefits. A disabled worker will begin to receive Social Security benefits upon meeting the Administration's definition of total disability.

B. Human Life Value

A person's **human life value** depends on numerous factors, including future income levels, value of homemaking and/or child care performed by a spouse who does not generate an income, taxes, education, training, anticipated future job promotions, and various normal detrimental factors, such as the possibility of illness, disability, periods of unemployment, and the like. This approach takes into account the factors of estate clearance costs, the new amount of income or new expenses to which the family needs to adjust after the death of the breadwinner, income for the family until the children leave the home, life income for the surviving spouse, special needs of the family (such as college education for the children), and other needs. Reasonable estimates of the present value of future earnings can usually be determined using four inputs or assumptions:

1. Current annual after-tax earnings;
2. The projected rate of growth of earnings;
3. The future working lifetime; and
4. An after-tax discount rate.

Given these four factors, the present value of future earnings may be computed using the present value of an annuity formula. The formula assumes that earnings are paid annually in the middle of the year, which is a reasonable approximation to monthly or other periodic payments throughout the year.

Assuming that an individual's after-tax income is $50,000 per year, the agent should estimate that it will grow at an average annual rate of 5%. If this individual is approximately age 35, he or she can expect to work for 30 more years. In this instance, an appropriate after-tax discount rate would be 6%.

So the present value of the future earnings is about $1,275,000. This figure is the amount that, if invested today at a 6% after-tax rate of return, could provide an after-tax income stream payable in the middle of each year for the next 30 years, with the initial after-tax amount starting at $50,000. Each subsequent payment will grow by 5%. After 30 years, the entire $1,275,000 would be used.

Example:

Let's assume that a 40-year-old insured earns $50,000 a year and is expected to earn the same amount until he retires at age 65. Out of his annual income, $40,000 is used to support family needs, and the remaining $10,000 is spent on expenses specific to the insured. Obviously, the $10,000 that is spent on expenses specific to the insured will no longer be needed if the insured dies. This means that the human life value of this insured to his family is $1,000,000 ($40,000 a year spent on family needs × 25 years to retirement). Based on this assumption, and taking interest and inflation into consideration, the insurance company will determine the right amount of insurance to produce the same annual amount of income for the family if the insured were to die.

C. Income Replacement Approach

The human life value concept has often been applied in wrongful death litigation and basically holds that the measure of the economic value of a life to those who depend

on that person is the present value of the future earnings potential of that person.

The income replacement approach to life insurance needs analysis is based on the premise that the basic objective of life insurance is to replace some or all of the earnings lost if an income-producing family member should die.

In other words, the insurance should be equal to the value of that person's future earnings potential to the surviving family members. The basic premise may be questionable because it ignores other equally valid reasons why a person may purchase life insurance. However, this method does allow one to estimate a maximum based on the idea that a person should never be worth more economically to beneficiaries dead than alive. This method may provide an accurate starting point for deciding how much life insurance a person needs, and is a relatively easy concept to understand.

The third approach is the **retirement needs approach,** which is often used for individuals when they are approaching retirement and have little debt or few obligations to support others. This approach calls for coordinating life insurance with other sources of retirement income, such as Social Security, pensions, and investments, to achieve a predetermined retirement income.

Most families purchase life insurance (at least initially) to protect their young, growing families. As their children grow up, they may feel that their need for insurance diminishes. The fact is, for many reasons, this need usually does not totally go away.

1. Family Support Ratio

Under the **income replacement approach,** insurance value is always less than human life value. The portion of after-tax income spent by the insured for self-maintenance is not available for support of the family, so only the remaining portion is devoted to or spent in support of the family. It is often assumed that about 25% of after-tax income is spent for self-maintenance and the remaining 75% for family support. However, this ratio may vary widely from family to family.

Under the basic premise of the income replacement method, one of the important elements of family support is the cost of the insurance itself. Because the amount spent for insurance is not otherwise available to support the family's standard of living, this cost should further reduce the proportion of income that is insured to support the surviving family members' standard of living. Once an estimate of the breadwinner's human life value is determined, that amount should be multiplied by the family support ratio.

The amount figured for the Family Support Ratio is not necessarily the amount of additional insurance required. This amount should be further reduced by the amount of any assets currently available to fund the survivor's income needs and by any life insurance currently in force. Among the assets that should be counted are marketable securities, savings account balances, and the like, as well as current vested account or benefit balances in employer-sponsored pension and profit-sharing plans, 403(b) tax-deferred annuities, IRAs, SEPs, and Keogh plans.

Some financial advisers feel that the family support ratio should also be increased to account for contributions or credits that would be made to employer-sponsored retirement plans, whether they are qualified or not qualified, while the breadwinner is living.

The family support ratio should be computed based on the reported after-tax income increased by the effective after-tax value of the 401(k) contributions. If the family support ratio is otherwise assumed to be 70%, it should be increased to 74.2% to account for the equivalent after-tax value of the employer-sponsored plan (70% × 6% = 4.2%).

D. Capital Needs Analysis

The amount of insurance should be sufficient to cover a family's economic needs if the breadwinner were to die tomorrow. Therefore, the starting point in capital needs analysis is an evaluation of income needs against the estimated income to be received upon the death of the breadwinner.

Capital needs analysis analyzes a client's needs and determines how life insurance can best meet those needs. From there, one can determine how much life insurance to purchase. Capital needs analysis uncovers a client's general financial problems or deficiencies so needs can be recognized. It helps ensure that the agent sells the right amount of life insurance to his or her client for the right reasons.

The average American family often finds it difficult to accumulate a meaningful amount of assets to leave to heirs. For many Americans, life insurance makes up at least 75% of the estates left behind at death.

Proponents of term insurance correctly point out that one's need for life insurance protection generally decreases over that individual's lifetime. This is because as one's obligations to others (children, mortgage company, etc.) decrease, their obligations to themselves (preparing for a stable and fulfilling retirement) increase. While this generalization is true, the need for life insurance protection rarely totally disappears.

Chapter Complete