CHAPTER 6

WHAT LIFE INSURANCE INVOLVES

Chapter Introduction

Insurance involves four aspects

- ✓ An asset
- ✓ The risk insured against
- ✓ The principle of pooling
- ✓ The contract

Let us now examine the features of life insurance. This chapter will take a brief look at the various components of life insurance mentioned above.

Learning Outcomes

A. Life insurance business – Components, human life value, mutuality

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1. The Asset - Human Life Value(HLV)

We have already seen that an asset is a kind of property that yields value or a return. For most kinds of property the value is measured in precise monetary terms. Similarly the amount of loss of value can also be measured.

Example

When a car meets with an accident, the amount of damage can be estimated to be Rs. 50,000.The insurer will compensate the owner for this loss.

How do we estimate the amount of loss when a person dies?

Is he worth Rs. 50,000 or Rs. 5,00,000?

The above question has to be answered by an agent whenever he or she meets a customer. Based on this the agent can determine how much insurance to recommend to the customer. It is in fact the first lesson a life insurance agent must learn.

Luckily we have a measure, developed almost seventy years ago by Prof. Hubener. The measure, known as **Human Life Value (HLV)** is used worldwide.

The HLV concept considers human life as a kind of property or asset that earns an income. It thus measures the value of human life based on an individual's expected net future earnings. Net earnings means income a person expects to earn each year in the future, less the amount he would spend on self. It thus indicates the economic loss a family would suffer if the wage earner were to die prematurely. These earnings are capitalised, using an appropriate interest rate to discount them.

There is a simple thumb rule or way to measure HLV. **This is to divide the annual income a family would like to have, even if the bread earner was no longer alive, with the rate of interest that can be earned.**

Example

Mr. Rajan earns Rs. 1,20,000 a year and spends Rs. 24,000 on himself.

The net earnings his family would lose, were he to die prematurely, would be Rs. 96,000 per year.

Suppose the rate of interest is 8% (expressed as 0.08).

Human-Life-Value (H.L.V.) = Annual Contribution for Dependents ÷ Rate-of-Interest.

HLV = 96000 / 0.08 = Rs. 12,00,000

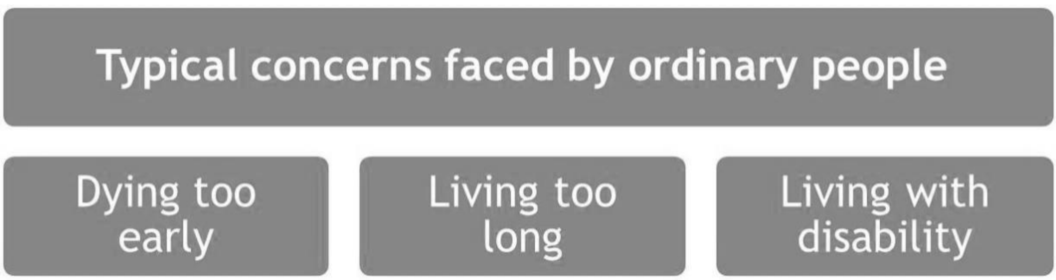
HLV helps to determine how much insurance one should have for full protection. It also tells us the upper limit beyond which life insurance would be speculative.

In general, we can say that amount of insurance should be around 10 to 15 times one's annual income. In the above example, one should grow suspicious if Mr. Rajan was to ask insurance of Rs. 2 crores, while earning only Rs. 1.2 lakhs a year. The actual amount of insurance purchased would of course depend on factors like how much insurance one can afford and would like to buy.

2. **The Risk**

As we have seen above, life insurance provides protection against those risk events that can destroy or diminish the value of human life as an asset. There are three kinds of situations where such loss can occur. They are typical concerns which ordinary people face.

Diagram 1: Typical concerns faced by ordinary people



General insurance on the other hand typically deals with those risks that affect property – like fire, loss of cargo while at sea, theft and burglary and motor accidents. They also cover events that can result in loss of name and goodwill. These are covered by a class of insurance called liability insurance.

Finally there are risks that can affect the person. Termed as personal risks, these may also be covered by general insurance.

Example

Accident insurance which protects against losses suffered due to an accident.

a) **How exactly does life insurance differ from general insurance?**

General Insurance	Life Insurance
Indemnity: General insurance policies, with the exception of Personal Accident Insurance, are usually contracts of indemnity	Life insurance policies are contracts of assurance. Indemnity means that after the occurrence of an event like fire, the insurer can assess the exact amount of loss that has occurred and pays compensation only to the amount of loss – no more, no less. This is not possible in life insurance. The amount of benefit to be paid in the event of death has to be fixed at the beginning itself, at the time of writing the contract. Life insurance policies are thus often known as **life assurance contracts.** An assured sum is paid to the nominees or beneficiaries of the insured when he dies.
Uncertainty: In general insurance contracts, the risk event protected against is uncertain. No one can say with certainty whether a house would be gutted by fire or whether a car would meet an accident.	In the case of life insurance, there is no question whether the event death would occur or not. Death is certain once a person is born. **What is uncertain is the time of death**. Life insurance thus provides protection against the risk of premature death.
Increase in probability: In general insurance, in case of perils like fire or earthquake, the probability of the happening of the event does not increase with time.	In case of life insurance the probability of death increases with age.

b) Nature of life insurance risk

Since mortality is related to age it means lower premiums are charged for those who are young and higher premiums for older people. One result was that individuals who were old but otherwise in good health, tended to withdraw while unhealthy members remained in the scheme. Insurance companies faced serious problems as a result. They sought to develop contracts whose premiums could be afforded and hence paid by individuals throughout their life. This led to the development of level premiums.

3. Level premiums

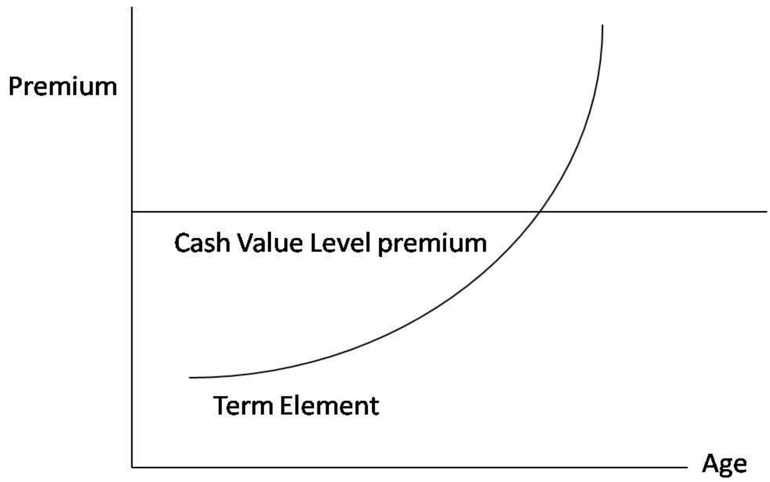
Important

The level premium is a premium fixed such that it does not increase with age but remains constant throughout the contract period.

This means that premiums collected in early years would be more than the amount needed to cover death claims of those dying at these ages, while premiums collected in later years would be less than what is needed to meet claims of those dying at the higher ages. The level premium is an average of both. This means that the excess premiums of earlier ages compensate for the deficit of premiums in later ages.

The level premium feature is illustrated below.

Diagram 2: Level Premium



Level premiums also mean, life insurance contracts are typically long term insurance contracts that run for 10, 20 or many more years. On the other hand general insurance is typically short term and expires every year.

Important

Premiums collected in early years of the contract are held in trust by the insurance company for the benefit of its policyholders. The amount so collected is called a “Reserve”. An insurance company keeps this reserve to meet the future obligations of the insurer. The excess amount also creates a fund known as the “Life Fund”. Life insurers invest this fund and earn an interest.

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a) Components of level premium

The level premium has two components.

i. The first is known as the **term or protection component**, consisting of that portion of premium actually needed to pay the cost of the risk.

ii. The second is known as the **cash value element**. It is made up of accumulated excess payments of the policyholder. It constitutes the savings component.

This means that almost all life insurance policies contain a mix of protection and savings. The more the cash value element in the premium, the more it is considered as a savings oriented insurance policy.

4. The Principle of Risk Pooling

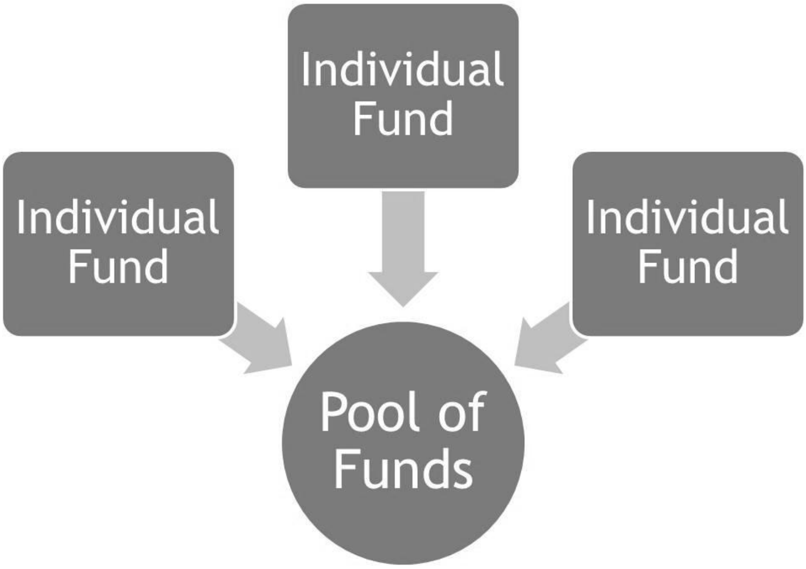
Life insurance companies have been classified as contractual financial institutions. This means that the benefits payable to policyholders have often taken the form of contractual guarantees. Life insurance and pensions have traditionally been purchased, above all things, for the sense of financial security they provide. This security arises as a result of the way the contracts are structured and certain safeguards are built to ensure that insurers are in a position to pay. The structure arises from the application of the mutuality or pooling principle.

Mutuality is one of the important ways to reduce risk in financial markets, the other being **diversification**. The two are fundamentally different.

Diversification	Mutuality
Under diversification the funds are spread out among various assets (placing the eggs in different baskets).	Under mutuality or pooling, the funds of various individuals are combined (placing all eggs in one basket).
Under diversification we have funds flowing from one source to many destinations	Under mutuality we have funds flow from many sources to one

Diagram 3: Mutuality

Mutuality (Funds flow from many sources to one)



Mutuality or the pooling principle plays two specific kinds of roles in life insurance.

i. The first is its role in **providing protection against the economic loss arising as a result of one's untimely death**. This loss is shouldered and addressed through having a fund that pools the contributions of many who have entered into the life insurance contract.

ii. The principle of risk pooling however goes beyond mortality risk. It can involve the **pooling and evening out of financial risk** as well. This is achieved by pooling the premiums, the funds and consequently the attendant risks of various kinds of contracts taken by individuals at different points of time. It is thus a case of pooling among different generations of policyholders. The outcome of this pooling is to try and ensure that in good as well as bad times the life insurer is able to pay a uniform rate of return (a uniform bonus) through smoothing out the returns across time.

5. The Life Insurance Contract

Diagram 4: Life insurance contract

The final aspect of life insurance is the contract. Its significance comes from the term sum assured. This amount is contractually guaranteed, making life insurance a **vehicle of financial security**. The element of guarantee also implies that life insurance is subject to stringent regulation and strict supervision.

Life insurers are required to maintain statutory reserves as a condition for writing the business. They may have stipulations governing investment of their funds, they have to ensure that their premiums are adequate and they may be subject to rules governing how they can spend policyholders' money.

A key question, often debated is whether the benefits provided to policyholders are adequate, compared to other financial instruments. Life insurance contracts, we must remember, involve both risk cover and a savings element. This makes it a financial product like other products in the financial market. Life insurance in fact has been less a protection product and more a way of holding wealth.

It is necessary to make a distinction here between pure term insurance, which provides only a death benefit and savings plans which have a large cash value or savings component. While the former has a low premium, the latter can be quite large and form a significant part of an individual's savings. This also means that the cash value has a large opportunity cost. The term 'opportunity cost' refers to the cost that one has to bear in terms of opportunities one forgoes by not placing one's money elsewhere.

In fact one of the major challenges facing conventional life insurance savings contracts came as a result of an argument termed as "Buy Term and invest the difference elsewhere". Essentially it was argued that one would be better off buying only term insurance from an insurance company and investing the balance premiums in instruments that could yield a high return.

It would be relevant to consider here the arguments that have been advanced for and against traditional cash value insurance contracts.

a) Advantages

i. It has historically proved to be a **safe and secure investment**. Its cash values guarantee a minimum rate of return, which may increase with contract duration.

ii. Regularity of premium payments calls for compulsory planning of one's savings and provides the **discipline** that **savers require**.

iii. Insurer takes care of investment management and **frees** the **individual** of this responsibility

iv. It **provides liquidity**. The insured can take a loan on or surrender the policy and thus convert it into cash.

v. Both cash value type life insurance and annuities may enjoy some **income tax advantages.**

vi. It may be **safe from creditors' claims**, generally in the event of the insured's bankruptcy or death.

b) Disadvantages

i. As an instrument with relatively stable returns it is subjected to the corroding effect of inflation on all fixed income investments.

ii. The high marketing and other initial costs of life insurance policies, reduces the amount of money accumulated in earlier years.

iii. The yield, while guaranteed, may be less than that on other financial market instruments. Lower yield is the result of a trade-off, which also reduces the risk.

Test Yourself 3

How does diversification reduce risks in financial markets?

I. Collecting funds from multiple sources and investing them in one place
II. Investing funds across various asset classes
III. Maintaining time difference between investments
IV. Investing in safe assets

Summary

a) Asset is a kind of property that yields value or a return.

b) The HLV concept considers human life as a kind of property or asset that earns an income. It thus measures the value of human life based on an individual's expected net future earnings.

c) The level premium is a premium fixed such that it does not increase with age but remains constant throughout the contract period.

d) Mutuality is one of the important ways to reduce risk in financial markets, the other being diversification.

e) The element of guarantee in a life insurance contract implies that life insurance is subject to stringent regulation and strict supervision.

Key Terms

1. Asset
2. Human Life Value
3. Level premium
4. Mutuality
5. Diversification