# PRINCIPLES OF RISK MANAGEMENT AND INSURANCE

## **CLASS NOTES**

### Chapter 16 Fundamentals of Life Insurance

#### Topics

- Premature Death
- Amount of Life Insurance to Own
- **O** Types of Life Insurance
- Variations of Whole Life Insurance
- **O** Other Types of Life Insurance

#### Premature Death

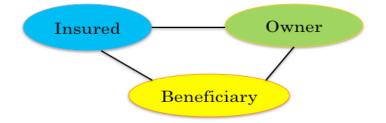
- <u>Premature death</u> can be defined as the death of a family head with outstanding unfulfilled financial obligation
  - Can cause serious financial problems for the surviving family members
  - The deceased's future earnings are lost forever
  - Additional expenses are incurred, e.g., funeral expenses and estate settlement costs
  - Some families will experience a reduction in their standard of living
  - Noneconomic costs are incurred, e.g., grief, loss of the parental rule model.
- Life expectancy has increased significantly over the past century
  - Thus, the economic problem of premature death has declined
  - Millions of Americans still die annually from heart disease, cancer and stroke
- The purchase of life insurance is financially justified if the insured has earned income and others are dependent on those earnings for financial support

#### Life Insurance Participants

Insured, owner, and beneficiary are three parties of life insurance.

- $\checkmark$  Insured: the person whose death causes the insurer to pay the claim .
- $\checkmark$  <u>Owner:</u> the person who may exercise the rights created by the contract.
- ✓ <u>Beneficiary:</u> the person receiving the proceeds when the insured dies. A person, a trust, an estate, or a business may be a beneficiary.

Three Parties of Life Insurance Contract



□ One person may be both insured and owner, or owner and beneficiary but a person cannot be both insured and beneficiary.

Example:

- ✓ You buy life insurance for yourself(both owner and insured are one person).
- ✓ You buy a life insurance for your husband/wife

(both owner and beneficiary are one person).

✓ If you are insured and anything happens to you, you can not be the beneficiary of your own life insurance (beneficiary and insured can no be the same person).

• Three approaches can be used to estimate the amount of life insurance to own 1- Human life value approach

- 2- Needs approach
- 3- Capital retention approach
  - The human life value approach
    - The amount needed depends on the insured's <u>human life value</u>, which is the present value of the family's share of the deceased breadwinner's future earnings

Amount of Life Insurance to Own

• To calculate the amount needed <u>under the human life value approach</u>:

**First**: Estimate the individual's average annual earnings over his or her productive lifetime

Second: Deduct taxes, insurance premiums and self-maintenance costs

**Third:** Using a reasonable discount rate, determine the present value of the family's share of earnings for the number of years until retirement

Types of Life Insurance

• Life insurance policies can be classified in two general categories:

- Term insurance provide temporary protection
- Whole life insurance or Cash-value life insurance

has a savings component and builds cash values

• There are many variations of both types available today

Term Life Insurance

- Under a term insurance policy, protection is temporary; protection expires at the end of the policy period, unless renewed
- Most term policies are <u>renewable</u> for additional periods
  - Premiums increase at each renewal
  - To minimize adverse selection, many insurers have an age limitation beyond which renewal is not allowed
- Most term policies are <u>convertible</u>, which means the policy can be exchanged for a cash-value policy <u>without evidence of insurability</u>
  - Under the <u>attained-age method</u>, the premium charged for the new policy is based on the insured's attained age at the time of conversion
  - Under the <u>original-age method</u>, the premium charged for the new policy is based on the insured's original age when the term insurance was first purchased

Whole Life Insurance

- <u>Whole life insurance</u> is a cash-value policy that provides lifetime protection
  - The death benefit amount is paid to a designated beneficiary when the insured dies, regardless of when the death occurs.
  - Why whole life insurance premiums initially are larger than term life insurance?

Because claims are a certainty with whole life policies, the insurer must collect enough premiums to pay the early death claims.

## Traditional whole life insurance

- ✓ Ordinary life insurance
- ✓ Endowment life insurance
- Modern variations of whole life insurance
- ✓ Variable life insurance
- ✓ Universal life insurance
- ✓ Variable universal life insurance
- ✓ Limited-payment life insurance

Traditional Types of Whole Life Insurance

- ✓ **Ordinary life insurance** characteristics:
- I- Ordinary life insurance is a level-premium policy that provides <u>lifetime</u> <u>protection</u> to age 100.
  - The excess premiums paid during the early years are used to supplement the inadequate premiums paid during the later years of the policy.
  - The insurer's <u>legal reserve</u> is a liability that must be offset by sufficient financial assets
- <u>Endowment insurance</u> pays the face amount of insurance to beneficiary if the insured dies within a specified period. If the insured is still alive at the end of the period, the face amount is paid to the policyholder
- Endowment insurance accounts for less than one percent of the life insurance in force

Modern Types of Whole Life Insurance

- <u>Variable life insurance</u> is a fixed-premium policy in which the death benefit and cash values vary according to the investment experience of a separate account maintained by the insurer
  - The premium is level
  - The entire reserve is held in a separate account and is invested in common stocks or other investments
  - Cash-surrender values are not guaranteed
  - Insurers do not guarantee a minimum cash value; however they do guarantee a minimum death benefit.

- <u>Universal life insurance</u> is a flexible premium policy that provides lifetime protection under a contract that separates the protection and saving components.
  - Except the first premium, the policyholder decides the amount and frequency of premium payments
  - The protection and saving components are unbundled or separated. An annual statement sent to the policy owner shows the premiums paid, death benefit, and value of the cash-value account.

Uses and Limitation of Universal Life Insurance

- ✓ <u>Advantages :</u>
- Unbundling or separation of protection and saving components
- Considerable flexibility
  - Cash withdrawals are permitted
  - Policies receive favorable tax treatment
- ✓ **Disadvantages include**:
  - Insurers advertise misleading rates of return
  - Cash-value and premium-payment projections can be misleading and invalid
  - Insurers can increase the mortality charge
  - A policy may lapse because some policy owners do not have a firm commitment to pay premiums
- <u>Variable universal life insurance</u> is similar to universal life insurance with two exceptions:
  - The cash values can be invested in the wide variety of investments.
  - The policy does not guarantee a minimum interest rate or minimum cash value and the policy owner bears the investment risk.

End of Chapter.