#### Lecture 1



Class: MSc

Subject: Insurance

Subject Code:

Chapter: Unit 3 Chapter 3

Chapter Name: Pricing element



# Today's Agenda

- 1. What is insurance pricing?
  - 1. Elements involved in the pricing of insurance
  - 2. Objectives of pricing
  - 3. Achieving optimal insurance pricing
  - 4. Sources of pricing information in insurance
  - 5. Savings aspect in insurance
  - 6. Investment aspect in insurance



## 1 What is insurance pricing?



The rate of charges or premiums set by the insurance companies.

Any company aims to set prices to maximize its profits. This is also referred to as optimal pricing. It is not different in the insurance sector.

Ideal pricing (or premium in insurance terminology) must cover:

- Variable costs
- •Operating expenses
- Profits



## 1.1 Elements involved in the pricing of insurance

The major components which determine the pricing of life insurance policies are :-

- 1) Mortality
- 2) Office expenses
- 3) Investment returns
- 4) Lapsation loading
- 5) Bonus loading





# 1.2 Objectives of pricing

Some of the important objectives of pricing life insurance products are as follows.

- **Rate adequacy** The pricing of life insurance products should not exceed the benefits that can be extracted from clients to safeguard the interest of policyholders.
- Rate equity- The objective of proper valuation directs the insurance companies to keep their pricing
  genuine and competitively developed keeping charges that are affordable as per the features covered
  in the product.
- **Rate transparency** Pricing bifurcation and cost centers in the price of insurance products must be easy to understand and the policyholders should not be charged more than the actual value of the policy.
- **Return value-** The pricing is placed to deliver the product's expected level of financial results. It must yield a return on capital invested and bring benefits to the Insurance companies.
- Rate impartiality- It is a regulatory requirement that pricing must not be discriminatory. When two people of similar exposure are given insurance, it must be charged at significantly comparable rates.



# 1.3 Achieving optimal insurance pricing

Determining the optimal premium involves minimizing variable costs, operating costs, and optimizing the desired profit margin. For insurance practice, this means:

- Increase the efficiency of the underwriting process (minimizing variable costs).
- Detecting fraudulent claims more effectively (minimizing variable costs).
- Minimizing the customer service, rent and other expenses.
- Realizing the realistic profit margin that does not lead to a reduction in the customer satisfaction. (Respect the law of supply and demand).



# 1.4 Sources of pricing information in insurance

Insurance companies rely on various sources of pricing information to determine appropriate premiums for insurance coverage. These sources provide valuable data and insights into the risks associated with different types of policies. Here are some common sources of pricing information in insurance:

- **1. Historical Data**: Insurance companies analyze their own historical data, including claims experience and loss ratios, to understand the frequency and severity of past losses.
- **2. Industry Databases and Studies**: There are industry databases and studies available that provide aggregated data and benchmarks for specific lines of insurance. These sources offer valuable insights into average loss costs, underwriting ratios, and pricing trends.
- **3. Actuarial Analysis and Modeling**: Actuaries use statistical models and mathematical techniques to assess risk, project future losses, and calculate appropriate premiums. They consider various factors such as policyholder characteristics, historical claims data, economic indicators, and external factors that may impact risk.
- **4. Market Intelligence**: Insurance companies continuously monitor the competitive landscape and market dynamics to stay informed about pricing trends. They analyze the pricing strategies and premiums offered by competitors to ensure their rates remain competitive while reflecting the risk exposure accurately.



# 1.4 Sources of pricing information in insurance

- **5. External Data Sources**: Insurers may access external data sources to augment their pricing information. These sources can include publicly available data, such as government statistics, demographic information, and economic indicators. They may also use data from specialized risk assessment providers, weather data, or data obtained through partnerships with third-party vendors.
- **6. Underwriting Manuals and Guidelines**: Insurance companies develop their underwriting manuals and guidelines based on their own experience, industry best practices, and regulatory requirements. These resources provide guidance to underwriters on risk assessment and pricing for various types of policies.
- **7. Loss Control Surveys and Inspections**: For certain types of insurance, such as property and liability insurance, insurers may conduct loss control surveys and inspections. These on-site visits help assess the risk exposures and loss mitigation measures implemented by the insured. The findings from these surveys contribute to the pricing determination process.



#### 1.5 Savings aspect in insurance

- 1. The most significant advantage of using a life insurance policy as a savings tool is tax saving. According to the Income Tax Act, 1961, life insurance plans offer dual tax benefits:
  - i. The premiums paid for the policy are eligible for tax exemption under Section 80C\* up to Rs. 1.5 lakhs. Hence, you can set more money aside by lowering your overall tax outgo.
  - ii. The maturity benefit offered by insurance plans is completely tax-free. This advantage can be availed under Section 10(10D)\* of the Income Tax Act. However, for this benefit, your total premiums should not be more than 10% of your annual Sum Assured.

You can also claim the above advantages for any add-ons and riders like accidental death benefit and waiver of premiums.

2. Given the rising cost of living, you must inculcate the habit of saving right from a young age. It is critical to save consistently, irrespective of how little the amount is. And a life insurance policy is a great enabler in promoting the habit of saving. A major advantage is that holistic plans, allow you to decide your premium payment frequency –monthly, half-yearly or yearly, to suit your financial conditions.



#### 1.6 Investment aspect in insurance

Insurance can be used as an investment source in a few different ways. Here are some common strategies:

- **1. Cash Value Accumulation**: Certain types of life insurance policies, such as whole life or universal life insurance, have a cash value component. A portion of the premiums paid goes towards the insurance coverage, while the remaining amount accumulates in a cash value account. This cash value grows over time, typically on a tax-deferred basis, and policyholders can access it through policy loans or withdrawals. Some individuals view this cash value as an investment source that can be utilized for various purposes such as funding education, supplementing retirement income, or providing a source of emergency funds.
- **2. Wealth Transfer**: Life insurance can be used as an investment source for wealth transfer purposes. High-net-worth individuals may purchase life insurance policies with large death benefits to provide a tax-efficient way of transferring wealth to their beneficiaries. By paying premiums into the policy, the insured individual effectively invests in the policy's death benefit, which is paid out to the beneficiaries upon the insured's death. This allows for the preservation and transfer of wealth across generations.



## 1.6 Investment aspect in insurance

- **3. Retirement Income**: Annuities, which are insurance contracts designed to provide a steady stream of income, can be used as an investment source for retirement planning. Policyholders can purchase annuities with a lump sum or through periodic contributions, and the accumulated funds grow on a tax-deferred basis. At retirement, the annuity payments provide a regular income stream to supplement other sources of retirement income, such as pensions or Social Security benefits.
- **4. Investment-Linked Policies**: Some insurance policies, such as variable life insurance and variable annuities, allow policyholders to invest their premiums in various investment options. These investment-linked policies enable individuals to allocate their premiums to a range of investment vehicles, such as mutual funds or separate accounts. The performance of these underlying investments determines the value of the policy's cash value or annuity payments, offering potential investment returns alongside the insurance coverage.