

A LAYMAN'S GUIDE TO INDIVIDUAL LIFE INSURANCE

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Preface

This document explores the concepts of Individual Life Insurance from a layman's perspective.

On reading this document, one would be exposed to the general concepts of Life Insurance and be prepared to delve further into broader aspects of Life Insurance.

Life Insurance

It is a known yet unspoken fact that life has to end one day. The question is when and where? One goes through different phases in life, where he embraces responsibilities and looks forward to abide by them. But, any moment can be his last. Every individual faces some or the other risk in his life. It's not just death alone; there are other insecurities like accidents, terminal illness too.

These insecurities are closely linked with one's fears. Why? Any of these risks like death, illness, etc may cause problems for his family, especially if he is the lone bread earner.

So, how does one reduce this insecurity? If someone gives him an assurance that on occurrence of such a dreadful incident (risk of death occurs), his family will be taken care of, he can be rest assured that his risks have been covered.

This assurance is given by Insurance providers, who undertake an agreement (policy) with the insured to cover the risk for a fixed amount to be paid at regular intervals (premium).

Types of Life Insurance

There are briefly two types of life insurance:

- Whole Life
- Term Life

Whole Life

Under Whole life insurance, the Insurance provider insures the insured from the time he applies for the policy till the age of 99 (i.e. his entire life). Here, the prime intent of acquiring a policy is guarantee against the risks of the insured.

Term Life

Under Term life, the Insurance provider insures the insured for a fixed period. The term (lifespan) of a term-life policy is defined by the Insurance provider (e.g. 10 years, 20 years, 30 years). Term life policies are more often looked upon as investment options. The returns offered (on the cash value/reserve) at

the end of a term life policy is usually higher than that of a whole life policy. Hence, here the prime intent of acquiring a policy is not only assuring guarantee of the risks of the insured, but also a source of investment for the policyholder.

Note: Policies that give you benefits in the event of the Insured's death and on maturity of the policy coverage are known as *endowment policies*.

Risks and their types

Any disruption in the normal routines of the insured that may change/alter his life or that of his family can be classified as a risk. Let's list down some of the common risks that come to our mind:

- Risk of Death
- Risk of Disability
- Risk of Terminal Illness

Risk of Death:

This is where the insured faces a risk of losing his life and thus insures himself against this risk.

Risk of Disability:

This is where the insured faces a risk of disability upon which he may not be able to continue with his occupation or professional life (E.g. A Dentist cannot continue his profession without his hands and A soccer player cannot play without his limbs). Under such circumstances, the insurance provider would either continue paying the premiums of the insured or pay the insured a lump sum amount.

Risk of Terminal Illness:

This is where the insured faces a risk of acquiring an illness, which would cost his life in a year. Such illnesses require huge sums of money for treatment. On occurrence of such a risk, the Insurance provider assures the insured a fixed sum of money or a percentage of the sum assured of the policy.

Let's put in some thought process here: Assume the insured is assessed with a terminal illness. So, the insured is expected to lose his life within a year and the Insurance provider is still insuring him against the risk of death. In this case, should the company charge the same Cost of Insurance? No. Why? The life expectancy of the person is very less. He is as prone to death as that of an old aged person (e.g. 99). Hence, the company could increase the age of the insured by a certain value and then charge a higher Cost of Insurance accordingly.

What is a Universal Life-Insurance policy?

Let's take a very general scenario: How long would you serve your employer? As long as the employer pays you, right? What if the employer stops paying you? You stop working.

It's very simple: nothing comes free in life.

Assume that one has taken a policy, where on payment of a monthly premium, the insurance provider continues to keep him insured.

So, what happens if the insured defaults to pay his premium for a few months due to some personal problems? The insurer will cancel his policy. In this case, if the risk (death) occurs, the person's family (beneficiaries) will not get any of the benefits assured to him.

In Universal Life Insurance, the insurance coverage does not depend upon the premium payments made by the insured (policy holder), but depends on the accumulated balance (reserve/cash value) of the premium payments made towards the policy.

Every Insurance provider would,

1. Charge an amount towards the services being provided called administration charges and
2. Pay commissions to its agents responsible for bringing businesses to the company.

These amounts are deducted from the premium paid by the policyholder.

The balance remaining after deducting the commissions, administration charges, etc., is called remainder, which is credited to the accumulated cash value/reserve.

What is Face Amount or Sum Assured?

Face Amount or Sum Assured (both are synonymous) is the amount (contracted) that is paid to the insured/policy holder/beneficiary on occurrence of the risk.

Eg. The amount that is paid to the beneficiary (could be spouse/mother/child) on the death of the insured is the face amount.

Remember, the beneficiary can also be the policy holder/insured himself.

Eg. Once the risk of terminal illness or disability occurs, the beneficiary will be the insured himself.

What is Cost of Insurance?

Cost of Insurance (COI) is the amount charged to cover the risk of the insured for the given month. This Cost of Insurance is deducted every month from the cash value/reserve and not the premium.

Some of the main factors on which the calculation of the Cost of Insurance depends are:

- The sum assured (Net amount at Risk)
- Plan of the policy
- Coverage (Type of Risk) for which the COI is being calculated
- Age

The calculation of the Cost of Insurance would vary from Company to Company (Insurance provider). The mortality factors have a major role to play in the calculation of the Cost of Insurance.

What constitutes the Premium?

Premium is the amount one agrees to pay the Insurer to insure his risks.

How is the premium of an insured derived?

The Insurance provider usually derives this amount through a process called the underwriting process. Some of the factors that are considered in this process are:

- Age
- Mortality factors
- Occupational hazards
- Medical history
- Personal habits

Other factors that affect the calculation of the premium could also be the type of plan that is being provided, the administration costs that are incurred by the Insurance provider, etc.

The Insurance provider may give several choices to the policyholder for paying his premiums. One may pay his premiums directly to the Insurance provider or may have his premiums deducted from his salary or from his bank account.

He may be given the option to pay his premiums monthly, quarterly, half-yearly or even once a year (frequency of payments).

Actuarial and Underwriting

Actuarial is the department that is responsible for collating market information like mortality rates, insurance trends, etc and translating this information into data that will be used by the underwriters while assessing an insurance application. This involves a lot of numerical and statistical data.

Actuarial is basically a science that includes a lot of mathematical (probability and statistics) methods used for risk assessment.
Actuaries are professionals who are highly qualified in this field.

Mortality rates are derived from mortality tables that are statistically based tables showing average life expectancies.

The following table is a typical mortality table:

8 National Vital Statistics Reports, Vol. 54, No. 14, April 19, 2006

Table 1. Life table for the total population: United States, 2003

Age	Probability of dying between ages x to $x+1$	Number surviving to age x	Number dying between ages x to $x+1$	Person-years lived between ages x to $x+1$	Total number of person-years lived above age x	Expectation of life at age x
	$q(x)$	$l(x)$	$d(x)$	$L(x)$	$T(x)$	$e(x)$
0-1	0.006865	100,000	687	99,394	7,748,865	77.5
1-2	0.000465	99,313	46	99,290	7,649,471	77.0
2-3	0.000331	99,267	33	99,251	7,550,181	76.1
3-4	0.000259	99,234	26	99,222	7,450,930	75.1
4-5	0.000198	99,209	20	99,199	7,351,709	74.1
5-6	0.000168	99,189	17	99,181	7,252,510	73.1
6-7	0.000151	99,172	15	99,165	7,153,329	72.1
7-8	0.000142	99,158	14	99,150	7,054,164	71.1
8-9	0.000139	99,143	14	99,137	6,955,013	70.2
9-10	0.000134	99,130	13	99,123	6,855,877	69.2
10-11	0.000165	99,116	16	99,108	6,756,754	68.2
11-12	0.000147	99,100	15	99,093	6,657,646	67.2
12-13	0.000176	99,085	17	99,077	6,558,553	66.2
13-14	0.000211	99,068	21	99,057	6,459,476	65.2
14-15	0.000257	99,047	25	99,034	6,360,419	64.2
15-16	0.000339	99,022	34	99,005	6,261,385	63.2
16-17	0.000534	98,988	53	98,962	6,162,380	62.3
17-18	0.000660	98,935	65	98,903	6,063,418	61.3
18-19	0.000863	98,870	85	98,827	5,964,516	60.3
19-20	0.000925	98,784	91	98,739	5,865,689	59.4
20-21	0.000956	98,693	94	98,646	5,766,950	58.4
21-22	0.000965	98,599	95	98,551	5,668,304	57.5
22-23	0.000987	98,504	97	98,455	5,569,753	56.5
23-24	0.000953	98,406	94	98,360	5,471,298	55.6
24-25	0.000955	98,313	94	98,266	5,372,938	54.7
25-26	0.000920	98,219	90	98,174	5,274,672	53.7
26-27	0.000962	98,128	94	98,081	5,176,499	52.8
27-28	0.000949	98,034	93	97,987	5,078,418	51.8
28-29	0.000932	97,941	91	97,895	4,980,430	50.9
29-30	0.000998	97,850	98	97,801	4,882,535	49.9
30-31	0.001014	97,752	99	97,703	4,784,734	48.9
31-32	0.001046	97,653	102	97,602	4,687,032	48.0
32-33	0.001110	97,551	108	97,497	4,589,430	47.0
33-34	0.001156	97,443	113	97,386	4,491,933	46.1
34-35	0.001227	97,330	119	97,270	4,394,547	45.2
35-36	0.001357	97,210	132	97,145	4,297,277	44.2
36-37	0.001460	97,079	142	97,008	4,200,132	43.3
37-38	0.001575	96,937	153	96,861	4,103,124	42.3
38-39	0.001672	96,784	162	96,703	4,006,264	41.4
39-40	0.001847	96,622	178	96,533	3,909,561	40.5
40-41	0.002026	96,444	195	96,346	3,813,027	39.5
41-42	0.002215	96,249	213	96,142	3,716,681	38.6
42-43	0.002412	96,035	232	95,920	3,620,539	37.7
43-44	0.002550	95,804	244	95,682	3,524,620	36.8
44-45	0.002847	95,559	272	95,423	3,428,938	35.9
45-46	0.003011	95,287	287	95,144	3,333,515	35.0
46-47	0.003371	95,000	320	94,840	3,238,371	34.1
47-48	0.003591	94,680	340	94,510	3,143,531	33.2
48-49	0.003839	94,340	362	94,159	3,049,021	32.3
49-50	0.004178	93,978	393	93,782	2,954,862	31.4
50-51	0.004494	93,585	421	93,375	2,861,080	30.6
51-52	0.004804	93,165	448	92,941	2,767,705	29.7
52-53	0.005200	92,717	482	92,476	2,674,764	28.8
53-54	0.005365	92,235	495	91,988	2,582,288	28.0
54-55	0.006056	91,740	556	91,462	2,490,300	27.1
55-56	0.006333	91,185	577	90,896	2,398,838	26.3
56-57	0.007234	90,607	655	90,279	2,307,942	25.5
57-58	0.007101	89,952	639	89,632	2,217,662	24.7
58-59	0.008339	89,313	745	88,941	2,128,030	23.8
59-60	0.009126	88,568	808	88,164	2,039,089	23.0
60-61	0.010214	87,760	896	87,312	1,950,925	22.2
61-62	0.010495	86,864	912	86,408	1,863,614	21.5
62-63	0.011966	85,952	1029	85,438	1,777,206	20.7
63-64	0.012704	84,923	1079	84,384	1,691,768	19.9
64-65	0.014032	83,845	1177	83,256	1,607,384	19.2
65-66	0.015005	82,668	1240	82,048	1,524,128	18.4
66-67	0.016240	81,428	1322	80,766	1,442,080	17.7

Note: The above table is only for representational purposes. Do not get into the intricacies of the table.

Underwriting is a process where one interprets the data of the insured (viz. medical history, occupational information, personal information, etc) and uses the actuarial data to give a verdict on the issuance of a policy. This process plays a major role in deciding the premium of a policy.

Examples: Lets look at a few examples that would make things more clear:

1. Example 1: If we have one person who is an alcoholic and a smoker, while the other (of the same age and profession) is a non-smoker and a non-alcoholic. Who's life expectancy do you think is less? Well, definitely the smoker and alcoholic person. So, why not charge an extra amount from him for his insurance.
2. Example 2: There are two professionals who need to be insured. One works with the fire brigade, while the other is a chartered accountant. Who do you think has a more risky profession? There's no doubt that the person working in the fire brigade faces more dangers in his profession and thus would be charged an extra amount based on his profession.
3. Example 3: Take a person who does not have a good medical history, who may be diabetic person or might have had a heart attack in the past. Insuring him is definitely not a profitable proposition for the Insurance provider. But, this is still business for the company. So, instead of denying insurance to the applicant, the Insurance provider would rather accept his insurance by charging an extra premium amount.

These are just some of the areas that underwriters look into while giving their verdict for an insurance application.

What is a Coverage/Rider?

The assurance given against each of the risks as classified above is known as a coverage/rider.

Eg. The assurance given against the risk of disability is known as disability coverage/rider.

Initially, Insurance providers provided insurance that covered only the risk of death of the insured. But, as time progressed and competition in the Insurance market increased, Insurance providers started providing more benefits to their customers allowing them to insure additional risks.

Today, one may have the following coverages under the same policy:

- Insurance against Terminal Illness
- Insurance against disability
- Insurance against the death of spouse

What is a Claim?

Claim is the process of applying (claiming) for the benefits (sum assured) on occurrence of a risk.

Eg. On occurrence of the death of the insured, the sum assured is paid to the beneficiaries through a process called the claim process.

How are claims paid?

The insurance company receives premiums from the policy owner and invests them to create a pool of money. A percentage of this money is carefully invested into various external funds, stock markets, etc. This helps in paying claims and financing the insurance company's operations.

Eg. An Insurance provider has one million policyholders. Assuming, as per the actuaries, the death rate is 10 in 10000, considering all the statistics and calculations. Hence, considering the death rate and the number of people paying premiums, the Insurance providers would always have healthy returns with proper planning, investments and strategies.

What are commissions?

In Life Insurance, business is primarily brought in by people called agents. They are trained professionals indirectly working for the insurance provider, who market and sell insurance to prospective customers.

What is in it for the agents who bring in new businesses for the Insurance provider? An agent would convince a person to get himself insured by the respective Insurance provider. In return the Insurance provider pays the agent an amount called commission.

The commission is usually a percentage of the premium paid by the Insured/policyholder to the Insurance provider. Commissions are usually paid for a fixed term.

Eg. Suppose a policyholder pays Rs. 10000 as the monthly premium to the Insurance provider. The insurance provider sets the commissions percentage at 30% for three years.

Then, in this case the agent who brought this business to the Insurance provider would get 30% of the premium (Rs. 3000) every month for the next three years.

How is a Policy Issued?

How is a policy issued?

The insurance provider through its agents would approach prospective customers and convince them to take a policy that would insure them of their risks.

Once convinced, the customer (applicant) submits an application to the Insurance provider.

Upon initial verification of all the required data, the application is then forwarded to the underwriting department. The underwriters would collate all the information of the applicant like occupation, medical history, etc. The underwriters then assess the information (medical history, occupational data, habits, etc) of the applicant and give their verdict. Using all the information at hand and the type of insurance requested for, the premium of the policy is calculated.

The insured would nominate beneficiaries for the policy (viz. spouse, children, etc).

The policy is then issued and the original policy (agreement) is handed over to the policyholder/insured.