

## HOW EQUITABLE ARE EQUITY- LINKED INSURANCE PRODUCTS?

- Dr. S. Uma & C.S.Kumar

### Abstract

Insurance markets around the world are changing. Policyholders want to enjoy the benefits of equity investment in conjunction with insurance protection, and insurers around the world have developed equity-linked contracts to meet this challenge. Evaluation of these products is not straight and easy, if not complicated, as the product has both insurance and investment elements. Investment performance and charges are the two main components determining the level of return in this nascent market.

The article deals with an important aspect of pricing and how the strategy adopted to recover the acquisition and management expenses impact the return on the equity linked products. It has been shown that high front end charges recovered in the initial year(s) results in low investible amount and in turn gives lower return when compared to the recovery of charges over sufficiently longer period of time.

After a brief introduction of unit linked products in India, the article takes a closer and critical look at the charges of unit linked insurance products (section 2) and their impact on return to policyholder (section 3). The last section identifies the issues and suggestions for regulation.

# **HOW EQUITABLE ARE EQUITY- LINKED INSURANCE PRODUCTS?**

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**Written for and presented at 7 th GCA, New Delhi 15-16, February, 2005**

**Subject Code (A)– Subject Group : Life Insurance**

## 1. Equity Linked Insurance

Insurance markets around the world are changing. The public has become aware of investment opportunities outside the insurance sector, particularly in mutual fund type investment. Policyholders want to enjoy the benefits of equity investment in conjunction with insurance protection, and insurers around the world have developed equity-linked contracts to meet this challenge.

Equity-linked insurance appears to have been introduced first in the Netherlands in 1953, and spread to the U.K. in 1957. In Canada, equity linked policies have been issued since 1967. The linked business has spread to the U.S. in late 70's. Germany introduced equity-linked endowment insurance recently. In India, Unit Trust of India introduced Unit Linked Insurance Product (ULIP) in 1971 with limited risk coverage.

Insurance business in the country has traditionally been dominated by endowment policies. Sale of money back and term insurance policies has gained momentum in early nineties. In the last 3 years (which marked private sector entry and interest rates decline in the economy) insurers are exploring the hereto untapped area of Unit Linked Insurance (ULI) in which the policyholders decide on fund management while getting insurance protection. The first linked policy from insurer's stable was introduced in February, 2001 by Life Insurance Corporation of India and majority of the private insurance companies have joined the fray soon after. Policyholders now have a variety of unit linked individual insurance and pension products under single premium and / or non-single premium payment modes with various riders attached. Linked group insurance products are also available. As per the data compiled by the IRDA, 2,45,199 linked policies were sold and premium of Rs.545.4 crores were collected (Sum assured Rs.5233.04 crores) for the 9-month period ended December, 2003.

The salient features of the unit linked insurance products are:

- Investment options ranging from 100% in liquid, risk free investment to 100% in equity fund are available for the policyholders to choose suitable options for them.
- The policy also offers facility for asset reallocation and portfolio rebalancing.
- Another feature of the product is complete transparency whereby expenses *interalia* mortality charges are disclosed.
- There is also flexibility with regard to risk coverage and premium payment.
- Easy liquidity through partial withdrawals, loans and surrenders.

Evaluation of these products is primarily on three aspects viz., returns, risk and other service related issues. Investment performance and charges are the two main components determining the level of return and would be the deciding factor for drawing the customers into this nascent, investment oriented market. This article takes a closer and critical look at the charges of unit linked insurance products (section 2) and their impact on return to policyholder (section 3). The last section identifies the issues and suggestions for regulation.

## 2. Charges

Unlike traditional insurance, unit linked insurance products emphasises on transparency, giving details of investment pattern and various charges to policyholders to make informed decision. Charges of an unit linked product can broadly be classified as Front End, Recurring and Rear end charges:

1. **Front End Charges:** Investment content rate of premium primarily depends upon these front load charges. That is, the level of front-end charges is the primary factor to reckon with in order to know how much money goes to the investment / separate account. Front end charges are:

- *Mortality charges:* Traditionally, insurance companies collect mortality premium over the term of the policy (known as level premium) in case of endowment and term products but linked products charge mortality expenses on one-year renewable basis. Most of the products introduced in Indian market follow this tradition and debit mortality charges on monthly basis by cancelling investment units. This practice ensures that there will not be any break in risk coverage.

Another point to be noted is that mortality charges are inversely proportional to fund value and vary with fund size. This is because the risk coverage is difference between chosen sum assured and accrued fund value. Once, the fund value exceeds the sum assured, the policyholder is not required to contribute towards life risk and the entire premium is allocated to investment account. These charges depend on age of the policyholder on the date of renewal.

- *Front Load:* This is to cover primarily acquisition costs such as agents' commission, product promotion expenses, policy issue costs etc., and the levy is usually as a percentage of premium(s).

**2. Recurring Expenses:** These expenses are deducted from the premium to meet their regular administrative, management and investment expenses.

- *Administrative charges* are either fixed amount per policy or variable (certain percentage of the fund value). Sometimes, fixed charges are indexed to price (like Retail price Index) in order to cover the inflationary effect. Variable charges depend on investment performance, i.e., the higher growth in fund, the more would be the charges.
- *Investment charges* are usually linked to the fund value and vary with the fund option. The quantum of charges depend on fund performance.
- *Switchover costs:* Switch over option embedded in linked policy enables policyholders to redirect fund value to suit their risk and return preferences. The charges associated with this option are either fixed (per switch over) or variable (percentage of fund switched).

**3. Exit charges:** These charges are levied when the policyholder decides to opt out of the policy before maturity. Exit options can be partial and / or full withdrawal (surrender) of the fund. Companies discourage full withdrawal either by imposing heavy exit charges or by disallowing surrenders. Surrender charges on regular premium policies are as high as 100%

(i.e., no withdrawal facility) in the initial years whereas single premium policies attract surrender charges as low as 4%. There are charges on partial withdrawals as well.

**4. Offer-Bid Spread:** Insurers calculate and disclose Net Asset Values (NAV) of unit linked products periodically. Allotment of new units and partial / full withdrawal of units are based on the NAV. There are loadings on NAV at entry and / or exit level, in order to meet the administrative expenses. Based on this loading, purchase (bid) and sale (offer) price of units are determined. The difference between purchase and sale price (referred to as offer-bid spread) is usually certain percentage of fund value.

### 3. Impact of Charges

Various charges described above play a vital role in deciding purchase / sale as the level of these charges is inversely proportional to the return on unit linked product. Pricing strategy adopted to recover the acquisition and management expenses differs among products. A random survey of charges on unit linked products available in the market indicated that there is a wide variation in front end charges (ranging from 60- 125% of premium payable) while the recurring and rear end charges do not vary much. It has also been seen that some products recover the major portion of the front end charges in the initial years and some other products spread it over a period of time.

Based on the market survey, we have considered three hypothetical products A, B and C with 60% (low front end charges), 90% (moderate charges) and 120% (high charges) of annual premium respectively. The charges on Product B are spread equally over the entire term, while major portion of these charges will be recovered in the initial years in case of other two products. To study the impact of these charges on the rate of return, we have carried out sensitivity analysis. Investment income is assumed to be uniform in order to show the effect of charges.

**Assumptions:** The cost involved in investing in products A, B and C are calculated on the basis of the following assumptions:

- Annual Premium 10,000
- Sum assured 1,00,000
- Risk coverage Higher of sum assured or fund value
- Age 30 yrs. Male.
- Term 10 years
- Growth rate of investment 10% p.a
- Offer-Bid Spread 5% of fund value

No rider benefits are assumed and front end charges such as annual mortality, front load etc., are deducted upfront from the premium. Recurring charges like investment and management expenses are uniformly deducted at the end of the year. Offer – bid spread is equally divided both at entry and exit stages. That is, 2.5% of fund value is deducted from premium at the time of allotment of unit and the balance 2.5% of the spread is considered at the end of the year. Spread and quantum of front end charges on products A, B and C are shown in Table 1 below:

**TABLE 1**

Product	Charges	1	2	3	4	5	6	7	8	9	10
<b>A</b> <b>(Low cost)</b>	Front end (% of annual premium)	20	20	4	3	3	3	3	2	1	1
	Recurring ( % of fund value at the end of the year)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	Surrender ( % of fund value at the end of the year)	100	100	100	0	0	0	0	0	0	0
	Offer-bid spread ( % of fund value)	5%									
<b>B</b> <b>(Level cost)</b>	Front end ( % of annual premium)	9	9	9	9	9	9	9	9	9	9
	Recurring ( % of fund value at the end of the year)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	Surrender ( % of fund value at the end of the year)	100	100	100	0	0	0	0	0	0	0
	Offer-bid spread ( % of fund value)										
<b>C</b> <b>(High cost)</b>	Front end (% of annual premium)	60	18	8	5	5	5	5	5	5	4
	Recurring ( % of fund value at the end of the year)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	Surrender ( % of fund value at the end of the year)	100	100	100	0	0	0	0	0	0	0

Note that recurring charges are uniform at 1.5% of fund value throughout the 10 year period and no surrender is allowed for the first 3 years in case of all the three products. Also note that the difference is *only* in the spread of front end charges.

Let us now see how these front end charges impact the return. Suppose a policyholder, aged 30, decides to invest Rs.30, 000 in unit linked products. He decides to buy products A, B and C on the same date and agrees to pay an annual regular premium of Rs.10000 under each product. Fund available for investment and fund value at the end of each year would depend on the front end charges. For example, fund value of products A, B and C, based on the assumptions, at the end of year 1 is given in the Table 2 below.

**TABLE 2**

(Amount in Rs.)

Year 1	A	B	C
Premium paid	10000	10000	10000
Less: Mortality charges	150	150	150
Less: Front load	2000	900	6000
Less: Offer Load	191.47	218.30	93.91
Fund available for investment	7658.53	8731.70	3756.09
Fund at the year end before recurring expenses @ 10% growth	8424.39	9604.88	4131.71
Less: Recurring expenses	126.36	144.07	61.97
Fund available at bid price	8090.57	9224.28	3967.99

Similarly, fund values at the end of each year of all the three products can be found out till the time of withdrawal/maturity. Note that no cash value is payable when the policy is surrendered in the first three years. To know the rate of return that the policyholder would get when he surrenders the policy, we have calculated internal rate of return at the end of 5 years and on maturity.

Suppose, the policyholder decides to terminate all of his policies after 5 years, the likely fund values he would receive at the end of year 5 are would be given in Table 3,

**TABLE 3**

	<b>A</b>	<b>B</b>	<b>C</b>
Fund available at bid price (Rs.)	53538.71	54662.33	47172.59
Internal Rate of Return (%)	2.29	2.99	-1.93

Assume that the policyholder continues to pay annual premiums for full 10-year period. The fund, after considering expenses and investment growth @ 10%, would have grown as in Table 4 given below.

**TABLE 4**

	<b>A</b>	<b>B</b>	<b>C</b>
Fund on maturity (Rs.)	139369.18	136845.86	128140.7
Internal Rate of Return (%)	5.96	5.63	4.46

- Note the difference in returns of products A, B and C in Tables 3 and 4.
- High front end charges in product C, results in low investible amount and in turn gives return lower. When compared to product A, returns are lower by 4.22% in year 5 (refer to Table 3) and are lower by 1.5% in 10 yr period (refer to Table 4).
- Product B's front end charges are 30% higher than product A. Product B gives the highest return of around 3% at the end of five years (Table 3). These higher returns are due to levelling of front end charges over the policy term, resulting in higher amount of premium for investment. However, as the term progresses, this excess return on Product B tapers in the next few years. Difference in returns between products B and A has come down from + 0.7% (2.99% minus 2.29% in Table 3) to -0.33 (5.63% minus 5.96% in Table 4) on maturity.

Let us now extend this study by including scenario testing. Two scenarios of investment growth – first, a lower growth of 6% and the second scenario assumes better 12% rate of return. Fund values at the end of year 5 and 10 when investment returns are at 12% and 6% are given in Table 5:

**TABLE 5**

	Growth Rate @ 12%			Growth Rate @ 6%		
	A	B	C	A	B	C
<b>Year 5</b>						
Fund available at bid price (Rs.)	56576.10	57886.54	49652.02	47892.98	48685 669	42531.21
Return (%)	4.15	4.92	-0.23	-1.43%	-0.15%	-5.35%
<b>Year 10</b>						
Fund on maturity (Rs.)	155398.39	153106.65	142262.86	101319.15	109533.89	104126.26
Return (%)	7.88	7.62	6.32	2.10	2.05	0.73

We can see that product C with high front end charges rank the least. To get a return comparable with products A & B, the fund should earn consistently higher return than average market returns. For instance, when average market growth is 10%, investment fund of product C should register a growth of 11.65%, to match return of Product B (5.6%) and still a higher growth of 12% to have return comparable with that of product A.

#### 4. Issues & Suggestions

We have seen that unit linked policyholder is served a *double blow* in terms of low investible surplus because of *heavy front load charges* in initial years and low (in some cases *nil*) return due to *heavy surrender charges* in the early years of policy.

This gives rise to the following issues:

1. Since the charges, especially steep front charges, affect the returns to policyholders, whether there can be any *restrictions / regulations on charges* of unit linked products?
2. Most of the unit linked products in the market today levy 100% surrender charges in the initial years of the policy. *Is this moratorium on Surrenders in early years necessary?*

Our suggestions on the above issues are:

1. **Restriction on Charges:** It is not uncommon to find restrictions on expenses in financial sector companies, which primarily deal with public money. For instance, SEC in the USA imposes certain restrictions on the charges of variable (unit linked) insurance products. Expense restrictions are prevalent in insurance as well as mutual fund sectors in India. In Canada, efforts are on to harmonise the regulations on unit linked insurance and mutual fund products.

We suggest that regulator should closely work with the players and actuarial professionals to fix limits on expenses. These limits may take the form of

- a. **Total Expense Limit:** These are the maximum expenses chargeable over the term of the policy. There may be a sub-ceiling on front load and exit load during the term of the policy.

- b. *Recurring Expenses Limit:* Management and investment expenses should be linked to the performance of the fund such as Net Asset Value.
- c. *Commission to Intermediaries:* Section 40A of Insurance Act, 1938 fixes the ceiling on commission payable to life insurance intermediaries. In the absence of separate regulation of unit linked products, which are new to the Indian market, the provisions of the Act are automatically become applicable. Since this product has more investment content and less of insurance element, the commission prescribed in the Insurance Act should be made applicable only in case of mortality charges. Charges prescribed for mutual fund selling by the SEBI may be the benchmark for investment element.

Of course, care should be taken so as not to restrict the flexibility of the insurance companies while framing the regulation in this regard.

2. **Classification of Charges** should precede the ceiling prescription on expenses. Charges can be classified under broad areas of front load, recurring and rear end charges as described under section 2 and should be mandatory for disclosure in the offer document.
3. **Moratorium on Surrender:** Surrender value is nothing but payment of cash value generated by the policy. Generally, low surrender value is to avoid adverse selection, restrict policy lapsation and avoid undue financial strain for the company. The surrender charges are justified to recover the levelled expenses in case of traditional insurance policies. In case of unit linked products, our suggestion is to link moratorium to the pattern of (high initial) expense recovery. That is, if the initial expenses of the product are recovered in the first year itself, there is no need to continue with the moratorium. However, a certain percentage of surrender charges be levied to avoid adverse selection and policy lapsation. While deciding the percentage of surrender charges, a point to be borne in mind is that investible fund becomes low when initial expenses are recovered at one go in the first year itself. Regulation specifying ceiling of surrender charges be framed to protect the interests of the policyholders.
4. **Disclosure:**
  - a. **Product features:** This is an important area that requires immediate regulatory attention. The current practice of disclosing the salient features leaves lot of confusion in the minds of prospective customers rather than clarifying. The product literature should be devoid of jargons and standard terminology and format be used to avoid confusion. The SEBI's Offer Document on Mutual Funds may be referral point for this.
  - b. **Fund Performance:** With the outsourcing of NAV calculation and dissemination, it is preferable if the NAV of the products are disclosed on a daily basis, like mutual funds. This would help unitholders to take advantage of market movements without any delay. In addition to the NAV, the details about the fund managers, benchmark index for comparing the investment performance of the fund etc., be disclosed at regular intervals.

5. **Separate funds:** It has been observed that a common fund is being maintained for all the unit linked products of a company that have similar fund options. Assume that Product A which was launched, say, in 2002 and has 3 fund options viz., Growth, Balanced and Secured options and Product B launched in 2003 is having 4 investment options viz., Growth, Balanced, Secured and Liquid options. It is observed that the companies maintain 3 common funds (for Growth, Balanced and Secured options) for both the products even though they were launched at different points in time. A point to be noted that in case of mutual funds, SEBI prescribes that separate funds are to be maintained for each product / scheme and interscheme transfers are allowed subject to certain conditions. A similar practice be followed in case of unit linked products.

These, we are sure, would go a long way in the orderly development of unit linked insurance market segment and for the protection of policyholders' interests.

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Authors are from National Insurance Academy, Pune. We would like to thank our Director, Dr.K.C.Mishra, faculty members Dr.R.K.Parchure, Mr.K.B.Saha, Mr.R.G.Shinde for their valuable comments and suggestions.

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