

## **"ACTUARIAL PROFESSION - ITS RISKS AND RE-ORIENTATION"**

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### **Summary**

Actuarial profession has been facing risks of being marginalised in view of the risk factors like aggressive stance of other professions, nature of changes in the fields of life insurance and pension, trends like shift from cross-subsidy etc. Actuarial profession needs to be re-oriented on the basis of identification of these risks and their implications.

**KEYWORDS** : Critical stage, futuristic perspectives, re-orienting and repositioning, creative contributions, global trends, convergence of financial services, new opportunities, 'financial sense of the future', survive and thrive, radical changes, value-added actuarial intervention, new form and new role.

**“ BERUF DES ACTUARS –  
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Zusammenfassung

Das Berufsfeld Aktuar hat sich Risiken ausgesetzt gesehen, sowohl durch andere Berufssparten als auch durch generelle Änderungen in der Versicherungswirtschaft. Das Berufsbild des Aktuars muss umdefiniert werden basierend auf den genannten Risiken und anderen Faktoren.

## **ACTUARIAL PROFESSION - ITS RISKS AND RE- ORIENTATION**

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### **1.0 INTRODUCTION :**

- 1.1 Actuarial Profession has reached a very critical stage. Its traditional boundaries are being more and more encroached by other professions in their bid to grow with time, its conventional areas of jurisdiction like Life insurance and Pension are also faced with their own crisis and no new exclusive field could be discovered for Actuaries. Also, the trends of a large number of 'actuarial' factors are, in some way or other, adversely affecting the comfort zone of the Actuaries. For example, the overall longevity of the population is increasing, the ratio of working population to retired population is steadily declining, mortality indications in the young to middle age-group are no more that comfortable, interest rate is showing a falling trend, society is disfavoursing the concept of cross subsidy, etc. The worst part is that all these are happening as a part of the natural process of changes taking place in the society and in the market, and the Actuarial profession can not expect any external force to help it out. It is therefore high time that the profession thoroughly deliberates on this issue and finds its own new ways out.
- 1.2 The related symptoms are neither unknown to the profession nor neglected. The leading Actuarial professional bodies all over the world have been discussing these problems and trying to find solutions in one way or other. However, the discussions made and the actions taken need to be more pro-active than reactive and also more widespread amongst all the layers of the profession . Besides, although the issue needs explorations to be made and initiatives to be taken by the profession, in fact it involves numerous external realities which need to be analysed in all its components, studied in depth, perceived with futuristic perspectives and need to be handled accordingly.
- 1.3 It is apparent that readjusting our own professional abilities would not be enough, rather it involves re-orienting and repositioning the profession in the rapidly changing world of business, finance and commerce, reinventing its inner worth and potential, value and relevance in various new ways, and establishing its worthiness to influence the oncoming changes by way of perceptible value addition. This indicates a new dimension in the professional initiative since it is required to take on the role of an explorer with all its inner strength and creativity. This also basically implies outstanding creative contributions from the individual Actuaries in this direction.
- 1.4 In this paper an attempt is made to review the present situation in this regard in a very generalised manner mainly to underline the crucial nature of this issue. It is neither exhaustive nor any country-specific (although written in India), instead some of the general global trends (dimensions varying from country to country) are touched upon with the simple intention of provoking more elaborate and enlightened discussion inside the profession.

## 2.0 LIFE INSURANCE :

- 2.1 Traditional Individual life insurance business has been gradually losing its grip in the market and this market feature alone is serious enough to sufficiently endanger the actuarial profession since this field is still considered to be the exclusive domain of the actuaries. It is therefore essential that the related factors are considered with all seriousness to understand the present position and chalk out the future direction.
- 2.2 Life insurance in its purest form was never considered to be a hot product in the market. It was popularised with appropriate mixture of savings element in various forms. But, considered from the viewpoint of savings instruments, the life insurance element substantially brings down the gross yield to maturity, whereas the death benefit provided is usually not considered as adequate compensation for this loss despite all marketing efforts to cover it that way. Interestingly, the savings element that was brought in to make life insurance product attractive became in a way impediment in the course of those life insurance products remaining attractive in the changing market situation with increasing investment-awareness.
- 2.3 The real problem, in fact, lies in the high acquisition cost of life insurance business. In life insurance parlance it is believed (based mainly on experience) that the life insurance products are not purchased rather need to be sold. The conventional, time-tested and most effective method of selling life insurance is still 'man-to-man' selling of life products through Agency force. This is naturally expensive and is the main reason for the distribution cost of life products being much more than that for other products, particularly other financial instruments. Because of this high acquisition cost, plus the heavy initial processing expenses in view of the very nature of the life insurance contracts as well as the costs of regular customer-specific typical transactions and settlement of claims (particularly death claims), the net yield on the savings component of the life products also (i.e, even leaving aside the life risk part) turns out to be much lower than that under other standard financial instruments in the market. As a result, investment-conscious people (their tribe increasing with time) do not find the conventional life insurance products worth investing in.
- 2.4 This low-yield angle from the savings side has been taken cognisance of, as evidenced in the variety of investment-linked life insurance products (where investment part is explicit) as well as surge of Term insurance products (where savings element is taken out). Interestingly, the new varieties of life products vary from one extreme to another – from no savings element to investment-oriented products with very thin layer of life insurance (particularly when life products offer tax-exempt benefits). Even attempts are being made to reduce the acquisition cost by trying alternative distribution channels.
- 2.5 Apart from trying to take proper care of the cost and the investment aspects, life products have also been enriched by covering new Morbidity risks in addition to the core Mortality risk, particularly Health-related risks like Dread Disease Cover, Hospitalisation Cover, Surgical Cover, etc. (in addition to conventional Accident-related Covers), which were in some way or other considered to fall in the area of Non-life insurance. But the fact remains

that all these steps also have not been able to fully galvanize the life insurance products against corrosion in their demand.

- 2.6 It is interesting to note that the above steps taken to improve the market of life business as such have more significant implications for the actuarial profession. When the investment part is explicit and separable, the liability valuation or profitability determination do not really require so much actuarial complexities – in fact, to a good extent, can be straightaway done by application of suitable Accounting methods. When the products become heavily investment-oriented, those products basically fall in the line of the other financial instruments and the same norms may eventually become applicable to these life products also. The way the morbidity risks are being covered by the life products, if the mortality risks are also covered in the same way by other financial service providers then the Life Companies may have to lose a major part of their market share to others, and this will have a tremendous impact on the Actuaries' services.
- 2.7 In the past also Life insurance industry had to face crisis of its own like high inflation, effect of AIDS etc., but the impending crisis hits at the roots of the existence of life insurance in its present form. Convergence of the financial services carry with it a threat to the present forms of life products, present pattern of life insurance marketing as well as the present type of Life Companies, but new opportunities are also likely to be there to evolve.
- 2.8 It appears that the concept of life insurance itself is undergoing some changes in perspectives as a result of the changes in the social values and structures as well as in general lifestyle and living pattern, and these changes now appear to be quite accelerated. We came from joint families to nuclear families and now we have been rapidly shifting to individualistic pattern of life. Marriage is becoming less pivotal in life than it was before. Family-oriented pattern is not necessarily the main option of life. Caring for others is now more professional than individualistic and seen more as the responsibility of the State than of the society. Society wants everyone to take care of oneself and the concept of cross-subsidy is no more acceptable. These values and concepts and patterns of life obviously take us away from the concept of insuring life for the sake of the loved ones, but in turn also necessitate adequate life insurance to safeguard one's own insurable interest since the other support pillars in the family or in the society are gradually disappearing. From this standpoint it appears that although in future the life products in the present forms may lose demand life insurance itself with its morbidity elements may become an essential ingredient in a large variety of financial products and services.
- 2.9 Actuaries being the acknowledged experts on life-related risks have the natural advantage of seizing these new opportunities. However, it must be appreciated that the opportunities may not simply come to the Actuaries unless the profession can prove its prime efficiency and establish its lead in respect of creating these new financial products..

### 3.0 PENSION :

- 3.1 Pension, the other traditional area of the Actuaries, has also been facing its own problems. With more and more ageing population the need for old-age pension and other old-care benefits are exponentially increasing but the providers are finding it difficult to provide these covers at attractive rates.
- 3.2 In respect of providing individual pensions all the factors affecting actuarial calculation are showing trends that make the actuaries (and as such the pension providers) uncomfortable. The expenses are going up as usual, but more important are the facts that the increase in old-age longevity is coming out to be much more than the actuarial projections made at the time of pricing the annuities and the interest rate has been gradually falling down. If provisions are to be made in the typical actuarial manner so that the provisions are believed (actuarially?) to be adequate, the resulting prices may seem to be quite odd in relation to the current market situation because the long term implications are not easily perceivable to the general public.. On the other hand, if the rates are made quite 'marketable' the actual experience may lead to financial loss of the provider and in consequence suffering for the pensioners and more complications for the pension industry as a whole. These problems are in addition to the existing complaint that the pensions of fixed amounts (or with limited increase) get their value increasingly eroded with rise in price level.
- 3.3 The trend of the solutions contemplated to handle this problem is to pass on the risks to the pensioners so that the pension amounts in future depend partly or fully on the investment returns available in the market and the mortality experience of the pensioners. The problem is that when the risks 'as it is' are passed on to the pensioners the 'security' element of the pension products gets missing and the actuaries can no more legitimately make the claim of 'making financial sense of the future' in the way we still claim to do so.
- 3.4 Actuaries have at their disposal all the elements of basic expertise required to understand this problem in its full depth. It therefore comes out that the ultimate fate of the present form of pension business and its growth in line with its full potential and particularly the continuing dominant role of the Actuaries in this respect will depend on how creative and innovative role the Actuaries can play to bring out effective 'actuarial' solution to this challenging situation. The pension field can not remain typically actuarial if the present pension products are ultimately substituted by, say, typical investment products and the Actuaries can not impress the market that they can provide solutions convincingly making 'financial sense of the future'.
- 3.5 Another important area is the scheme pensions. The problems of providing immediate pension are similar to those mentioned above, although may not yet be so pronounced unless the fund for paying pension is already demarcated or the number of active members in the scheme do not increase in sufficient number. But the problems are there.

3.6 The Actuarial profession is also seriously affected by the method of funding the Pension schemes. Defined Benefit pension schemes traditionally required and utilised actuarial expertise for the purpose of funding and other related exercises, but the increasing current trend is towards Defined Contribution schemes because it is simple for both the employer and the employees (as also others) to understand the funding arrangement (without the help of an Actuary). employer's liability is limited and known in advance, there is no cross-subsidy amongst the employees, scheme operation can be transparent to all concerned and there need not be any problem in case of transfer. Defined Contribution scheme has its limitations in respect of serving its main purpose, but to the dismay of the Actuarial profession all the related parties at this moment seem to be happy to get rid of the actuarial complexities of the Defined Benefit pension scheme in addition to the other practical as well as perceived inconveniences of that scheme. We certainly need to learn some lessons from this phenomenon, particularly as to how to adjust ourselves with the changing social trends. Such adjustment is by no means easy to do, nor can it be done in a pre-determined way, rather it is a process of evolving with time in the bid to survive and thrive.

3.7 Because of the age-old involvement of the Actuaries in the field of pension funding, Actuaries are still believed to be capable of adding value even to the apparently simple arrangement of Defined Contribution pension scheme. Actuaries need to refine the respective skills and pinpoint the value additions to maintain the hold of the profession in this area.

#### **4.0 ALTERNATIVE RISK TRANSFER MECHANISMS & WIDER FIELDS :**

4.1 Alternative Risk transfer mechanisms like Derivatives have evolved in the market process to meet the emerging needs of the financial market. Such mechanism as well as the emerging patterns discussed earlier make it clear that the existing nature of the life insurance products, pension products as well as the other financial products may undergo some radical changes with changing market trends and emerging market needs. Obviously this will necessitate re-alignment of the Actuarial profession vis-a-vis other related professions.

4.2 Application of actuarial skills in the non-conventional fields at increasing scale clearly indicates the relevance and importance of the Actuarial profession in the changing situations. It is therefore necessary to develop actuarial skills suitable for applications in multiple financial disciplines and other fields, but it is all the more necessary for the profession to get increasingly involved in these areas and make its presence felt. A particular field may not become exclusive domain for the Actuaries, but it may be possible to find particular areas in various fields for useful and value-added actuarial intervention. In this process the profession can find its new form and new role.

## **5.0 OVERVIEW :**

- 5.1 Review of the present situation in respect of the Actuarial profession as above clearly indicate that the Actuarial profession may have to undergo some transformation to adjust itself to the external environments. The profession has to overcome some impending threats, but it will have its own opportunities too to grab.
- 5.2 Actuarial core expertise relates to handling life-related risks as well as other types of risks and their financial implications. In the increasingly complicated life situations actuarial expertise may find scopes for playing more meaningful role in providing financial solutions. More refined actuarial skills may be found extremely useful in handling the risks in the increasingly vulnerable financial market. General actuarial skills are already being increasingly utilised to assess and handle risks in many new areas and may become more relevant in future with nature of risks getting more complicated. The areas of operation and the relevant methodology will undergo changes accordingly, but essentially the Actuaries need to take the lead individually as well as a profession and pro-act as well as react.