Working Group Report on Index Linked Insurance Products (ILIP)

Proposition: This report presents the research, deliberations and the recommendations of the Working Group constituted by the IRDAI vide an office order Ref: IRDAI/ACTL/ORD/MISC/224/08/2020 dated 31^{st} August 2020 on the subject of Index Linked Products.

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1. Executive Summary

1.1 The Insurance Regulatory and Development Authority of India (IRDAI) vide an order dated 31st August 2020 constituted a Working Group (WG) consisting of six members for the purpose of examining the need of index linked products in India. The terms of reference of the order required WG to consider practices that exist abroad, practices that existed in India and also other aspects including availability of indices in India, issues around reserving, administration and market conduct.

1.2 In accordance with the terms of reference, the WG deliberated on various aspects and tried to strike a balance between the need to be innovative but at the same time ensuring customer centricity and considering the current regulations in place.

1.3 The WG has the view that there is relevance for Index Linked Insurance Products (ILIP) which could be seen as a category which fits in between traditional products where features can appear less transparent and the unit linked products (ULIP) where transparency is higher but the investment risks are completely borne by the policyholders. The considered view of the WG was that ILIP could be seen as a suite of products wherein greater transparency can be facilitated to the customers with respect to product structure and benefits and where risks are in line with the choice made by the customers.

1.4 The relevance of ILIP is further enhanced, in the current context of volatile investment markets leading to the customer preference for guarantees and which has therefore possibly resulted in the current industry practice of selling significant amount of guaranteed products (including annuities and savings products) with plausible increased balance sheet risk for the insurers

The WG therefore believes that ILIPs could be an apt alternative or complimentary option to the current conventional guaranteed products (including annuities and savings products) and ULIPs, particularly in the context of volatile investment markets /stressed interest rates.

1.5 While recommending the ILIP, the WG followed the key principles of Transparency, Simplicity, Fairness, Awareness and Liquidity of Indices. The WG also acknowledges that ILIP in certain forms and shapes can bring about more complexity at the back end and hence decided to recommend different variants of a product structure wherever possible, starting from the ones which are simple (linked to fixed/G-Sec income linked indices) to more complicated structures.

1.6 Hence, recommendations are sub-divided from Variant 1 to Variant 3 for each product types, where Variant 1 product structures are the simplest and benefits are linked to a single simple/well understood/liquid index while the other Variants are more complex and benefits could be linked to multiple indices including equities.

1.7 Further, the product structures are mainly proposed under the traditional participating (Par) and non-participating (Non-Par) designs. The WG believes that ILIP under the Par and Non-Par platforms gives additional options to customers. In the Non-Par ILIP category, since the enhancement in benefits may only happen either in reference to the allocated premium i.e., the premium received net of the pre declared charges, if any, or the sum assured, the benefit accumulation rate linked to the index has to be the fixed rate as per the formula/process approved in the File and Use. However, under the Par designs, the policy expenses and margins may need to be recovered from the returns of investment, the benefit accumulation rate and hence could be expressed as a range with reference to index. Further, for non-par, the specified value as per the formula remains constant for whole of the policy term while for par, the specified range is not guaranteed for whole of the policy term rather they can vary every year within the range as approved in the File and use.

1.8 Also, it is proposed that ILIP are required to have non-zero positive minimum benefit addition in reference to the premiums or to the sum assured as applicable, the level of which can be left to the insurers to decide. Further, unlike in ULIP, the actual investments can be different from the composition of the specified index, depending on the risk appetite of the individual insurer.

1.9 Annuities need a special mention in light of some projections which estimate that nearly 20 percent of the Indian population will be senior citizens by the year 2050. The WG deliberated various options especially related to annuities and the need for inflation linked annuity payments taking cognizance of the challenges in finding matching assets for these liabilities, primarily the lack of index linked bonds in the Indian market.

1.10 Hence, one of the recommendations for annuities with return of purchase price, is to allow an additional option of resetting of annuity rates after a specified frequency while ensuring a minimum stipulated guarantee throughout the term of the annuity. These designs will not only enhance customer value and facilitate greater options to choose from but are also expected to reduce the risk to the insurer. Also, the accumulation of annuities at a specified rate linked to an index is also recommended which can help make annuity payments inflation linked to some extent.

1.11 The WG believes customer disclosures are extremely important for ILIP and the disclosures have to be proportional to the complexity of the product designs. However, a balance has still to be ensured between amount of information and its utility. Some of the disclosures could be web site displays like the past performance of suggested indices and also its current returns accessible to the customers. Also, calculators can be made available to the policyholders which would indicate the projected future returns to the customers with a caveat that past performance is not necessarily an indication of future returns and also that returns may not exactly match the returns on index to which it is linked. In the customized benefit illustrations, the benefits accumulation under a certain rate of return based on certain period of past performance of say three to five years of the index may be shown in addition to the current standard rate of 4% p.a. and 8% pea, or as is decided by the regulator.

1.12 The WG's recommendations related to ILIP is to ensure that designs are by and large consistent with various provisions under the current regulations such as pay-outs on surrender, death benefits etc. There are some exceptions in the recommendations though, especially around investment in index under ULIPS where certain changes in regulations may be considered.

1.13 The structure of the report starts from the overall scanning of the products, indices, regulations and management and valuation of such products starting from past to present and leading to how these could be adopted in future in a systematic manner in order to strike the right balance between innovation for need satisfaction and appropriate disclosures for protecting policyholders' interests.

1.14 An appropriate approach in the current context may be to start initially with simple products to allow options/designs which are consistent with the current regulations and gradually to start/allow more innovative and complex product designs supported by increased/proportionate customer disclosures.

2. Life Insurance Products in India – Historical Context

2.1 The last three decades have seen phenomenal change in the Indian life insurance market. The product solutions have evolved significantly from a typical traditional set of products up to the year 2000 to those of the international standard products now and so the industry has witnessed a range of innovations in product solutions being offered to the customers in the market. Therefore, it is important now to look back and understand the drivers of the product designs, innovations and changes in the regulatory environments in order to achieve customer centric solutions and any gaps therein to be bridged.

2.2 In the 1990s, life insurance products were mainly dominated by the participating traditional plans and some form of annuities. However, the latter part of the decade witnessed launch of quite a few term insurance plans, ULIPs and fixed benefit health plans and may be that was one important phase for product innovations and which picked up rapidly after the opening of the insurance sector.

2.3 In the year 2000, massive changes happened in the designing of the new life insurance products with the opening up of the insurance sector in the year 2000-2001. Many of the domestic companies formed a joint venture partnership with overseas life insurance companies and overseas companies brought in some different product designs mainly influenced by some of the popular products overseas.

2.4 In the initial years, the conventional products (traditional) dominated the market. But in the next few years, ULIP and universal life products started to emerge as popular products and the life insurance sector witnessed significant growth in this line of business. In ULIP, the return to the policyholders is directly linked to the market performance of the underlying investments and for universal life, the crediting rate used to be based on more stable return of the underlying asset portfolio.

2.5 The ULIP design became very popular and by the year 2010, ULIP became almost a leading driver of the business for most of the life insurance companies. The customers preference to this product was may be due to the fact that the returns were linked to market and also with the perception of being a transparent product. It worked well for the life insurance companies also as they had all flexibilities to design and price these products and so it was delivering the desired economic value to them.

2.6 During this period, the first product guideline on ULIP was issued by the regulator in the year 2005 to standardize the designing of the products and bring in more transparency and comparability across the market. Also, the intention was to enhance the insurance cover in a consistent manner and preserve the long-term nature of the insurance products while also providing fair insurance coverage and disclosures to facilitate informed decision by the policyholders. The guidelines were subsequently followed up with various circulars and clarifications issued by the regulator.

2.7 The next decade i.e., 2010s was the decade when various product related regulatory changes took place when Product Regulation 2010, Product Regulation 2013 and then Product Regulations 2019 were framed. These frequent regulatory changes, though limited some of the flexibilities with regard to designing and pricing of the products but facilitated the standardization of the product designs, charging structures, benefits structures, disclosures and selling practices. These changes have helped in creating awareness about the life insurance products and making it more acceptable and transparent to the policyholders. Also, these changes have helped insurers to look at products designs beyond ULIPs and saving products and hence have also started focusing more on plans like pure protection plans.

3. Life Insurance Products in India – Current context

3.1 Despite so much progress in the industry on product designs and standardization of various practices, the attractiveness of some of the products particularly unit-linked plans have gone down to some extent among the stakeholders. Therefore, before evaluating and recommending any new product designs it is important to critically look at the relevance of various products currently selling in the market and their attractiveness to various stakeholders.

Unit Linked Insurance products (ULIP)

3.2 These are the products where saving benefits are directly linked to the market value of the underlying investments and so they are non-guaranteed except for pension. The sum assured for the insurance protection remains level. The charges are deducted as per the framework prescribed by the unit linked regulation and charges normally covers allocation charge, policy administration charge, charges for insurance covers and fund management charge. In case of early termination even surrender charge is allowed. All these charges must be deducted up to a limit and in a manner as allowed by the unit linked products regulation. It offers full upside benefits but no downside risk protection for the policyholders. The main challenges with this category of product are as follows:

- By design they are complex. So firstly, it becomes a challenge for the distributors to understand it and then bigger challenge is to explain it to the prospects.
- The investment risk is borne by the policyholders but there is a large segment of the population which does not fully understand this risk associated with such products or specific assets underlying their policies and so tend to compare their return with other benchmarks. This always leave scope for complaints of mis-selling specifically when underlying investments are not performing in line with some more known benchmark indices.
- The cap on charges has restricted the ability of the insurer to recoup the expenses and desired profit margins charge thereby reducing the profitability of the insurance companies and increasing their new business (NB) strain leading to higher capital requirements with consequential impact on allowable distribution related costs and profit margins.

Traditional Non-Participating Plans

3.3 The non-par traditional plans offer mainly lump sum amount in the event of death or maturity and /or income benefits on survival, but premiums and all benefits are fully guaranteed in terms of absolute amount at the outset, for the entire term of the policy. So, it offers fixed benefits without any upside from there but also any without downside risk to the policyholders. Since downside risk i.e., risk of falling interest rate in future is borne by the insurer, the fully guaranteed benefits are normally priced taking prudent interest rate assumptions. The challenges with this product category are as follows:

- Maturity and insurance benefits are fully guaranteed at the outset even for regular premium policies, where except for the first premium, rest of all the premiums will be received in future. So, there is no certainty at what rate of investment return such premiums will be invested in future. This poses a very high asset liability mismatch and reinvestment risks for the insurers as though liability is already guaranteed at outset, but the assets growth is exposed to the uncertainties of future.
- Since Life Insurers have been underwriting business under this category of products for quite some time, gradually it is building up a solvency risk for the industry in scenarios of inadequately hedged portfolios and continued adverse movement in interest rate over prolonged periods in future. Also, such open uncovered risks on the balance sheet of the life insurance companies can also have consequential impact on the policyholder's benefits.
- These products are simple for the policyholders as premium and benefits both are guaranteed and known upfront to the policyholders and have been popular for large segment of society. This is one of the reasons that the popularity of such guaranteed products has been there fairly consistently. However, to manage the asset liability mis-match risks, insurers have to price these products prudently. The prudent approach necessitating in pricing could reduce their return which perhaps can be avoided if benefits can be made variable in future by reducing the guarantees.
- Many of the insurers are hedging the interest rate risks by entering to some forward contacts with banks, which help them to lock-in the yield on investment of future premiums. But then it exposes the balance sheet and hence the solvency position to the risk of upward movement in interest rate. So, these forward contracts may not be fully protecting the balance sheet and the solvency completely. The size of the market for such arrangements is also very limited as of now in proportion to the risks being underwritten by the industry.

Traditional Participating (Par) Plans

3.4 The third category of products is participating plans, which are not new to the market. The par products provide balance between the ULIPs and traditional non-par plans by providing minimum guaranteed benefits, so downside risk is protected and at the same time it offers the opportunity to participate in the upside surplus of the fund by way of bonuses. However, it has its own limitations.

3.5 The challenge comes in explaining the bonus rates to the policyholders. It often becomes difficult to unbundle these products and to explain the direct linkage between the declared bonus rate and the investment performance of the underlying par fund or link it with the performance of the financial market say prevailing interest rates. Also, the critical aspect is how to manage policyholder's reasonable expectations (PRE) and how to reconcile the bonus rates declared by different insurers. So, this product category despite being popular for long is at times viewed as not so transparent from the point of view of understanding the returns to policyholders.

Pure Protection Plans

3.6 The pure protection plans include term plans which cover risk of death as well as fixed benefit illness benefits. These plans offer long term cover against insurance risks but normally the sum assured remains level. So, after some years in future, the effective real value of the risk cover can start diminishing because of inflation. Some variants of increasing cover option are sold but there too, the premium rate remains levels and hence increasing cover can become expensive and unaffordable. So, the main challenge for this product category is how to maintain the real value of the risk cover throughout the policy term.

Annuity Plans

3.7 For a society with increasing number of senior citizens, annuities and pension products provide a very useful financial tool to receive the guaranteed fixed income benefit for the entire life of the purchaser. The payment of annuity could commence immediately on a payment of lump sum premium under an immediate annuity plan or the payment of annuity can start after a gap of a chosen term under the deferred annuity plans. There are some variants of these annuities like life annuity or annuities payable for the minimum fixed term and thereafter life, annuity benefit with return of purchase price on death etc. The annuity payments could be contingent on survival of single life or joint life as well. The main challenge for annuities is that insurers need to guarantee the annuity benefit pay-outs for a very long term without necessarily having the opportunity to invest assets of matching term and so carry unhedged reinvestment risks. For the policyholders, the annuity benefit remains a fixed periodical amount throughout the life and it loses the real value over time due to inflation.

4. Suitability of Index Linked Plans (ILIP)

4.1 Keeping in view some of the challenges which exist with various line of products as highlighted in section 3 above, a need exists to have Index Linked Insurance Products (ILIP) which would not only give more options and alternatives to the policyholders to choose from, but also could help the insurers to manage their asset liability management risks in a better way. The main advantages of ILIPs in this context, could be as follows:

- Some of the designs of ILIP could be similar to the ULIP, so it would offer similar kind of transparency and flexibility as in ULIP but lesser risks for the policyholders particularly those who are not comfortable taking exposure to the volatility of the financial markets and are more comfortable with investment in better known asset mix like well-known indices.

- ILIP can possibly be offered as an alternate to the fully guaranteed non-par products. This could allow the insurers to price these products more realistically and offer better value to the policyholders.

- A design of an ILIP can be developed to match it with traditional par products where equivalent to bonuses, a regular additions or final addition to the policy or cash pay outs could be determined under a ILIP products by linking it to some external pre disclosed Index. This would be more transparent and easier to understand for the policyholders.

- For other line of products as well like term insurance and annuities, where traditionally benefits and premiums remain fixed for the entire term of the policy, the benefits and premiums could be linked to some suitable index to offer benefits which reflect the prevailing market conditions. Some policyholders might find it more useful and prefer to choose it in line with their matching risk appetite

5. Index Linked Insurance Products in India – History

Regulatory Developments

5.1 During the years 2000-2010, a new category of products started becoming popular in North American markets, called as Universal Life/Variable Universal Life products. Their popularity in the developed markets was driven by the greater flexibility as they provided, transparency, lower business strain and better returns to the policyholders as compared to the non-linked conventional type of products. Around the same time, few of the Indian insurers also started to design such products and offered them as a variant of conventional products.

5.2 In the year 2010, after a careful study of the design of such Universal Life/Variable Universal Life products in several countries and having regard to the specifics of the insurance industry in India and also in order to bring uniformity in design of these products considering in particular the concerns of market conduct, consumer awareness and approaches to policyholder protection, the IRDAI issued guidelines in the regulation on Universal Life/Variable Universal Life products which were named as VIP Products.

5.3 Some basic features of universal life /variable universal products prescribed in these product guidelines are listed below:

- It could be offered only under non-unit linked platform
- It must be offered as traditional products either as participating or non-participating
- The product must have a guaranteed interest rate, referred as minimum floor rate which shall be guaranteed for the whole term and shall be calculated on the policy account. The insurer may also declare an additional investment return at periodical intervals
- Single premium or Limited premiums shall not be allowed
- Death benefit is equal to the guaranteed sum assured plus the balance in the policy account and maturity benefit equal to the balance in the policy account together with a terminal bonus (in case of participating product), if any, as applicable
- Surrender value is prescribed as percentage (%) of the policy account value depending on the year of surrender
- Only mortality cover to be provided, no other life contingency shall be covered other than death. The sum assured shall at least be ten times of the annualized premium.
- Limit is put on allowable expense and commission components put together
- Lock-in period of three years, provision of top-up and loan not exceeding 60% of the balance in policy account, no partial withdrawals, no riders, no group insurance contract were some of other features prescribed.
- The policyholder shall be offered flexibility of changing the sum assured during the currency of the contract subject to a minimum sum assured as approved in the F&U. When the sum assured is changed, such change will be effective from the next immediate policy anniversary.

5.4 As per the same regulatory product guidelines, the administration/system & other requirements of VIP products (apart from setting up the above features) were as follows:

- The premium shall be shown separately as risk premium, charges, commission and policy component
- Every policy shall have a corresponding policy account whose balance shall depict the accrual to the policyholder where the policy account shall be credited with premium net of all charges
- Policy account statement shall be issued at the end of each financial year to the policyholder giving the breakup of the closing balance, premium received, deductions towards mortality, commission and expenses, minimum floor interest earned, additional interest earned or bonus declared and added and closing balance.
- The statement of policy account shall be sent to the policyholder at least once a year
- The insurer shall keep a separate account of all receipts and payments in respect of this product
- Valuation of assets and liabilities shall be in accordance with the IRDA (Assets, Liabilities and Solvency Margin) Regulations, 2000.

5.5 The disclosure requirements mandated were:

- The products shall not be sold as universal life or unit-linked products
- The promotion architecture and the key features document to be sent to all prospective policyholders shall disclose, apart from whatever else may be specified from time to time, the following:
    - Guaranteed minimum floor rate; sum assured; premium paying term
    - A clear disclosure of the premium showing the four components separately
    - Lock-in period and the treatment of monies during lock-in period in the event of surrender
    - Interest rate on loan, if applicable
    - A declaration that this is a non-linked insurance product.

5.6 Keeping in view the fast-changing environment and need of the customers, the regulator again came out with new set of product regulations in the year 2013. The objective of these regulations amongst other things included providing a decent/reasonable return to the policyholder while also ensuring consistency in product designs/benefits offered by the insurers. There were changes in the provisions governing the VIP products (as per 2010 guidelines) under 2013 product regulations.

5.7 Post the issuance of the 2013 product regulations, the VIP products which were existing as on the date of notification of these regulations, were withdrawn as they were not in compliance with the provisions of these regulations.

5.8 The basis on which the said VIP product structure (as per product regulations 2013) was developed was to ensure that the products are simple, transparent and easy for the customer to understand while also providing value for money.

It is however observed that this structure did not gain enough acceptability and traction and were not largely offered by insurers.

5.9 In this regard, the possible area of concern for non-acceptability of the VIP product structure as per the 2013 product regulations could be the reduction in yield (RIY) requirement and additional administrative requirements such as maintenance of shadow account etc.

In the year 2019, the authority reviewed the product regulations based the experience, changes in the economic conditions and expectations of the customers. After due consultations and deliberations with the industry and all the relevant stakeholders, 2019 product regulations were notified. One of the objectives of these regulations is to ensure that insurers follow prudent practices in designing and pricing of life insurance products, to protect the interests of the policyholders and to ensure sound and responsive management practices for effective oversight and adequate due diligence.

6. Index Linked Products launched in India in the past

Traditional Index Linked Products

6.1 Hitherto, five life insurers launched a total of twenty (20) index linked investment products at different points of time. All these products were individual products and were mainly on traditional Non-Linked Non-Par platform.

6.2 In the IRDAI (Non-Linked Insurance Products) Regulations, 2013, it was mandated that for non-linked non-par products, the benefits should be explicitly stated at the outset and not to be linked with any index or benchmark. In view of this regulation, since benefits were not explicitly stated at outset in these products rather were dependent on the performance of some market index, these products did not qualify the criteria and hence all were withdrawn as soon as this product regulation came into effect.

6.3 At high level, the features of these products and their investment guarantees were as below:

General Features

6.4 All the endowment plans, money back plans and whole life plans where benefits linked to an index accrued only till the end of the premium paying term or the deferred annuity plan / pension plan, wherein the benefits linked to an index accrued till the end of the deferment period were considered in this category. The indices used in these products were only G-Sec Bonds. In these products, the policy value increases by way of additions linked to the yield of the underlying G-Sec bonds.

Additions to Policy Value

6.5 The additions were generally referred to as Survival Additions or Monthly Additions or Annual Additions etc. These additions accrue yearly or monthly or as and when premium is paid and start getting added to the policy with the payment of first premium or after payment of 2 years' premiums. Such accumulated additions are payable on maturity / surrender / death / end of premium paying term (for whole life). The additions once added, will not decrease due to any fall in G-Sec yield during the policy term.

6.6 There were various ways in which additions were determined and added to the policy. The major variants are as below:

- Specified as % of total premiums paid
- Specified as XX rupees per Rs. 1000 Sum Assured.
- Specified as % of Sum Assured.
- Specified as % of guaranteed annual / monthly pay out in case maturity is paid as annual / monthly pay out during the pay-out period.

6.7 The minimum guaranteed return to the customer were in the range of 4.25% to 6.00% per annum. To this minimum return, there were further addition/reduction of benefits which were linked to the movement in the reference G-Sec rate. If actual G-Sec rates were higher than the specified rate, the 60% to 75% of such higher rates were passed on to the customers by increasing the base return.

6.8 If G-Sec rates were lower than the specified rate, the 75% to 80% such lower rates were passed on to the customers by reducing the base return.

Indices used for Index Linked Products

6.9 The insurance companies usually used G-Sec bond yields in following manner for determining the benefit additions:

- G-Sec bond tenure – For Example 5 years, 10 years
- G-Sec Publisher details – FIMMDA, CRISIL, Bloomberg

Investment Guarantee

6.10 The details are in the Table below:

Variant in additions to Policy Value	Investment Guarantee
Specified as % of total premiums paid	Apparently, no upfront investment guarantees were provided to the customer other than that implicitly factored in the formula to determine the addition rate.
Specified as XX rupees per Rs 1000 Sum Assured	Apparently, no investment guarantees are available to the customer. The Guaranteed additions (such as Rs 45 / Rs 65) were set to increase or decrease as per the formula.
Specified as % of Sum Assured	A guaranteed % of sum assured as an addition was provided. Such additions could further be enhanced with the movement in the G-Sec rates.
Specified as % of guaranteed annual / monthly pay out, in case maturity benefit is paid as annual / monthly pay-out during the pay-out period.	A guaranteed % of guaranteed annual / monthly pay-out was provided. That could further be enhanced with the movement in the G-Sec rates.

Formula used

The major variants in the product design were the different ways in which the additions to the benefit were determined according to the specified formulae. The various formulae used were as below: *Where Additions were specified as a % of total premiums paid:*

1	<u>As used in Whole Life Plans</u> Addition to policy is (G-Sec Rate + 0.50) % of total premiums paid till the end of the premium pay term.
2	<u>As used in Endowment plan</u> For upward G-Sec rate movement: Base Rate + X % of (G-Sec Rate – Specified Rate) For downward G-Sec rate movement: Base Rate – Y % of (Specified Rate – G-Sec Rate) Base Rate varies from 4.25% to 6.00% per annum. X% varies from 60% to 75% Y% varies from 75% to 80% Specified Rate varies from 7.00% to 7.50% per annum The exact formula used by one insurer is given as below as an example. 4.25% + 60% of any excess of the G-Sec rate over 7.50%; or 4.25% – 75% of any excess of the 7.50% over the G-Sec rate

Where Additions were specified as XX rupees per Rs 1000 Sum Assured:

6.11 The patterns of reference to Index were similar to the details as mentioned under the earlier section except the complication in the method of determining the additions as per 1000 Sum Assured.

6.12 The sample formula used is as below:

- Rs 45 + (G-Sec rate – 7.5%) * F * 100; where F is a factor based on the policy term. (Rs 45 may be the guaranteed addition which is enhanced / reduced as per the above formula)
- For example, if the benchmark rate is 9%, annual additions for a policy with 20-year term shall be 60.345 per Rs 1000 Sum Assured, guaranteed additions are enhanced by Rs 15.345 per Rs 1000 Sum Assured

G-Sec Rate	Policy Term	
	15	20
>=7.5%	9.73	10.23
<7.5%	8.22	8.72

Additions specified as percentage (%) of Sum Assured

6.13 The pattern of reference to index was similar to the details mentioned earlier except that the G-Sec linked performance is expressed as a specified % of Sum Assured. When additions were expressed as % of Sum Assured, it was normally expressed in tabular format. The additions as % of Sum Assured vary by the yield bands of 50 basis points for interest rates between 4.00% - 12.00%. No additions were applicable for G-Sec rate lower than 4.00%, with the level of additions remaining constant for G-Sec rate above 12.00%. The sample table is given below:

Yield on G-Sec rate	Sum Assured Additions as % of Sum Assured	Yield on GSec Rate	SA Addition as % of Sum Assured
< 4.00%	0.00	8.50% to < 9.00%	6.82
4.00% to < 4.50%	0.54	9.00% to < 9.50%	7.69
4.50% to < 5.00%	1.11	9.50% to < 10.00%	8.54
5.00% to < 5.50%	1.70	10.00% to < 10.50%	9.44
5.50% to < 6.00%	2.33	10.50% to < 11.00%	10.42
6.00% to < 6.50%	2.99	11.00% to < 11.50%	11.45
6.50% to < 7.00%	3.69	11.50% to < 12.00%	12.53
7.00% to < 7.50%	4.42	>=12.00%	13.52
7.50% to < 8.00%	5.18		
8.00% to < 8.50%	5.98		

Where Additions specified as % of guaranteed annual / monthly pay-out, in case maturity benefit is paid as annual / monthly pay out during the pay-out period:

6.14 In this category, maturity benefit was payable in the form of guaranteed annual / monthly pay out during the payout period of 5 years or 10 years.

6.15 The reference pattern to index was similar to the details mentioned under earlier section except that the G-Sec linked performance was expressed as specified % of guaranteed annual / monthly pay-outs.

6.16 Additions to the guaranteed annual/ monthly pay-out was expressed in tabular format as per the details mentioned in earlier sections.

Variable Index Linked Plan (VIP)

6.17 This category of products was specifically introduced in the Product Regulations of 2013 but was withdrawn in the Product Regulations of 2019. Structurally these products were like universal life products in North American market where an account is created at policy level and premiums were deposited in the account which grows with the credit of interest rate at regular intervals. The fees and charges to provide insurance cover and administer the policy were deducted from the policy account. Though it was allowed by the product regulation 2013 but life insurance companies preferred not to launch VIP products mainly due to following reasons:

- The investment pattern had to be maintained like that for traditional policies and so equity exposure was limited.
- It was subject to a minimum benefits of account value without any flexibility to declare negative return, which restricted the investment in equities and taking market risks.
- Though by design it was similar to ULIP but it did not have choice of multiple funds. The surrender value also used to be subject to the market value adjustment, which looked too complex and non-transparent.
- Due to above reasons, it ended up as an instrument which would be heavily invested in government bonds and debt securities and so unlikely to generate higher return than any traditional policies.
- These products were also subject to Reduction in Yield (RIY) criteria and so profit margins were low and capital requirement was high for shareholders.
- The commission rate was no better than ULIP.

6.18 So, industry viewed it as inferior version of ULIP with lesser flexibility and transparency and greater administrative hassles. Therefore, VIP as a product category could not create much interest among stakeholders. However, these products without the need for the administratively complex requirement of Reduction in Yield (RIY) and with the provisions of transparent charging structures could perhaps be a good option between traditional products and ULIPs.

7. Index Linked products – International Markets

7.1 Index Linked products do exist around the globe in various structures and designs. These designs arguably were most popular in the United States (more than Europe) following which some of the Asian countries followed the designs which succeeded in the US. Perhaps the most popular design of an index linked product in the US (which then got replicated in some of the Asian markets) is the Index Linked Universal Life design.

Index Linked Non-Par Universal Life

7.2 This is generally a non -participating flexible universal life plan where some of the benefits are guaranteed while others are non-guaranteed.

7.3 The 'indexed' portion of the name refers to the way crediting rates are determined. The crediting rates are indexed or linked to one or more equity indices. The crediting rate linked to an index doesn't necessarily mean the crediting rate will reflect the exact returns of the index but rather the crediting rate will be in line with the specified index return subject to participation rates or caps or floors as specified in the policy conditions. The participation rates represent the percentage of the index's appreciation which will be credited to policyholders while the cap represents the maximum amount that will get credited at any point in time. The floors limit the minimum return of the index that can get credited to the policyholder.

7.4 The guarantees could be in the form of the *floors* or could be in the form of explicit non-zero return that the policyholder will earn on the fixed (which is not index linked) account where some portion of his premium will get credited based on his choice at outset.

Index Linked (Deferred/Immediate) Non par Annuity

7.5 This is a single premium non-participating fixed indexed annuity that earns interest based on changes in a market index or indices in the deferred phase or in the income phase.

7.6 The mechanics of this product work very similarly to the index linked universal life product mentioned in Section 7.2 where the customer has many choices in choosing the crediting rate from a fixed guaranteed interest rate to combinations of a fixed guaranteed interest rate and index linked crediting rates.

7.7 There are designs which exist where some of the crediting rate options continue in the income phase too depending on whether the customer chooses to delay the receipt of the entire guaranteed income or choose not to receive 100% of the guaranteed income.

Inflation linked Non par Annuity

7.8 An inflation-linked annuity is non-participating where the annuity payments will move each year in line with the Retail Price Index. The design aims to protect the real value of the annuity payments but the payments will generally start at a much lower rate. However, such an annuity though much needed, in Indian context, would be a challenge due to lack of index linked assets.

Index Linked Par Endowment

7.9 This is a product apparently gaining popularity in the German markets. Before 2010, the German life market was dominated by the traditional participating products. But this product form improvised, given the low interest rate environment coupled with the advent of Solvency II capital requirements where capital requirements for traditional par products were high.

7.10 The innovation is within the par chassis itself where there are no changes per se regarding the way annual dividends (bonuses) are declared. The innovation is with respect to the utilization of the distributed dividends where the policyholder is given the option to invest those dividends in accounts which has a crediting rate – the crediting rate can vary based on movement in certain indices.

7.11 The risk associated with the participation in the index movements is entirely borne by the policyholder, so in that sense this innovation is a mix of participating vs non-participating but based on information available and these products are classified as participating.

7.12 However, such products for their complexity may be a bit of a challenge in the Indian context.

8. Index Linked Products in India – Recommendations going forward

Principles and Basic Considerations

8.1 The following principles and considerations underline the recommendations on the various ILIP designs:

- **Simplicity:** The design must be simple and easy to understand for the policyholders. The guaranteed benefits and the benefits linked to the index must be clearly stated at the outset.
- **Transparency**: Policyholders should be able to understand in a transparent manner how the policy benefits are determined and how the benefits are built up over the term of the policy.
- **Fairness:** The benefits and returns to the policyholders and the shareholders should be reasonable and fair.
- **Awareness and Liquidity of the Index:** The Index used should be widely known and understood by the policyholders and should also be having high liquidity.

8.2 The need for innovation and variety could be met by starting with products which are simple in nature possibly linked to a single index which are less complex and highly liquid e.g., G-Sec index. Due to the simplicity, disclosure requirements won't be onerous. Other complex variants with mix of indices or other complex designs could be considered subsequently as experience builds.

8.3 Hence, most of the following recommendations on the product structure have base variant as Variant 1 which could be the simplest one and then higher variants have been recommended with relatively more complex structure, keeping the base product design unchanged. The higher complex variants are recommended to give wider choices to the policyholders, but it could render the product design as more complex.

8.4 All the proposed designs of index linked insurance products (ILIP) will fit into one of the existing categories of the product like participating, non-participating, unit linked, annuities or pure protection plans. So, index linked product need not create any new product category or line of business.

8.5 Within any given product category, the design of the index linked product could be different but the general rule that part of the benefits would be guaranteed at outset and the rest of the benefits are linked to the performance of an underlying Index in a pre-defined way, remains unchanged.

8.6 The indexed benefits under a policy could be determined with reference to performance of an index such as reference to the value or yields of the index itself or it could be benchmarked to the change in the value of the index over given intervals or any other derived numbers e.g., yield of bonds

8.7 The boundary conditions for the products like minimum term, sum assured, death benefits, surrender benefits, lapse, revival, loan etc. will be subject to the provisions of the Product Regulations 2019 and other regulatory stipulations.

8.8 The valuation of the liabilities and investments will be as per the relevant regulations applicable to the product category into which the index linked product will fall. However, if any relaxation is required to support any index linked products, the same may apply in the manner allowed by the authority.

8.9 The policyholder benefits will be determined with reference to the performance of the underlying Index. The insurer should however have the flexibility to hold actual investments in assets different from the underlying index depending upon their individual risk appetite and as per the risk management policy.

Index Linked Traditional Non-Linked Plans

Product Structure 1- Variant 1

8.10 The design of the product could be similar to any non-par endowment plan. There may be a sum assured and a corresponding premium depending upon age at entry, which will be payable during the premium payment term. The maturity benefit will be payable at end of the policy term. The insurer will have to define the minimum non-zero positive floor rate and the benchmark rate for addition of regular benefits. The benchmark rate could be defined as benchmark returns basis performance of the underlying index, less/more the spread.

8.11 In case of Non-Par products, the spread of say "x" will be defined at the outset and the same will remain constant throughout the policy term.

8.12 In case of Par products, the spread could be in a range say minimum "x" and maximum "y" so this "x" and "y" will remain constant throughout the policy term but the insurer can determine the benchmark rate every year for addition of benefit taking any spread between "x" and "y". Hence while for Non-Par the value is fixed as per the formula, in case of Par, the value of additional benefit could be a range as per the formula. For example, for a Non-Par design the benefit accumulation rate each year could be specific value e.g., between 75% and 90% of index return, while for a Par design the benefit accumulation rate could be say a range of 60% to 100%. The value and range mentioned here as per the formula filed and approved is only for the indicative purpose and the actual value or range may be as per the approved formula in the File and Use documents of an insurer.

8.13 This differentiation of Non-Par and Par is possible and recommended as while under Non-Par the value has to be fixed in advance, under the Par products there will be greater discretion but limited to a stated and disclosed range. That would allow insurer to have flexibility in the investment strategy to optimize returns within the stated risk appetite.

8.14 Therefore, in addition to the maturity value expressed in terms of the percentage of total premiums paid or sum assured, in some of the designs a regular benefit may also accrue to the policy at regular intervals at annual or at lesser frequency, may be called survival addition or as final addition to the policy, at the time of exit, calculated on the basis of a predefined formula. The accrued survival addition will be payable on death or maturity. Alternatively, it can be taken as cash value as well as in form of regular income.

8.15 The value of the survival addition will not be guaranteed at outset in absolute amount rather it may depend on the level of performance of the underlying Index. The value of the survival addition may be set in reference to the value of

Index through a simple and an explicit formula defined at the outset, which is easy for the customer to understand. The simplest could be say yield on 10 years G-Sec bond add/less x%, which may be applied to each of the premium paid based on the performance of the benchmark G-Sec over such period or it may be referenced to the Sum Assured. The spread of x% could vary by many factors like size of the annual premium, sum assured, level of the Index, term of the policy or duration of the policy considering the expenses etc.

8.16 The preferable index for such products could be the indices on G-Sec Bond yields or any other bond yields which are liquid and traded in a volume.

8.17 The minimum death benefit could be the sum assured plus the accrued survival addition further subject to the minimum death benefit as required by the Product Regulations 2019.

8.18 On maturity, the company could offer additional survival addition linked with or in reference to the value of the Index depending upon the product design. The minimum maturity benefits could be the total of sum assured if any set for maturity and all accrued survival additions. The maturity benefit can be paid in lump-sum or as income benefit over the given term.

8.19 In case of early surrender of the policy, a stated cash value of the accrued survival addition could also be payable in addition to the base surrender value.

8.20 The non-forfeiture/paid up benefits will be determined in accordance with product regulation 2019. The survival additions for the paid-up policy may be proportionately reduced.

8.21 To re-iterate, the death benefit and surrender/paid up benefits and all other product conditions will always be subject to the minimum benefits and other conditions as required by the product regulation 2019.

Product Structure 1 - Variant 2

8.22 The product could offer survival benefit pay-outs at regular intervals rather than a lump sum payout at maturity. In such design, company could offer to make cash payments of the accrued survival addition with each survival benefits or alternatively pay only base benefit as survival benefits and accrues all survival additions till maturity date.

8.23 The company may choose a combination of indices here. For example, a combination of a G-Sec bond indices of different tenures or corporate bond indices of different tenures.

8.24 The survival addition rate may change with the change in level of index and also could vary by the size of annual premium or by any other relevant factors.

Suitability for the Customers and Disclosures

8.25 This product could offer appropriate insurance & saving solution for customers with relatively lower risk appetite and who seek transparency in benefits under his/her policy. This also provides alternative to customers who prefer conventional participating endowment plans as this provides benefits in line with chosen index with relatively greater transparency as compared to conventional participating plans.

8.26 The benefit illustration for these products could be similar to the one prescribed for ULIP Products. However, the benefit illustration may contain demonstration of expected returns at the rate of interest rates which could be the average return under the benchmark index over a period of 3 to 5 years in addition to the interest rates as decided under the regulations.

8.27 The website of the insurer should show the projected returns at maturity based on the trends of returns under the specified benchmark or their mix. Potentially, the customer should be able to create his/her login and see the actual/expected returns under his/her policy. In case of combination of indices, the rate of return should be based on the weightage average of such indices.

Investment of Fund

8.28 Since this is a non-linked traditional plan, it should be subject to the investment regulations as required for the controlled fund. So irrespective of the index chosen the actual investments can be held in government bonds, corporate bonds, equities, properties etc. subject to investment limit as required by the investment regulation for the controlled fund. However, the mismatch between the assets of the underlying Index/Indices and the investments actually held will depend upon the risk appetite of the individual insurer.

Valuation of assets and liabilities

8.29 Since this product falls under the category of non-linked traditional plan, the investment may be valued in the same way as controlled fund.

8.30 The approach of liability valuation may be same as for non-par traditional plan i.e., gross premium valuation and all the accrued survival additions from the past to be allowed as payout with sum assured on death and on maturity. Allowances to be made for accrual of survival addition in future as well consistent with the expected performance of the underlying Index/Indices and the best estimate valuation discount rate used to be consistent with projection rates and MADs will apply on top.

Product Structure 2 – Variant 1

8.31 This design is more like that of a Universal Life Product and such plans were allowed until Product Regulation 2019 came into effect. But the category had its own challenges and hence very few insurance companies have launched such products. However, if more pricing flexibility was provided, the products would have been attractive for policyholders as well as shareholders.

8.32 The product could have sum assured as the minimum death benefit payable on death of the life insured. There may be a minimum premium payable every year over the policy term or for shorter period for the given sum assured as required by the Product Regulation 2019.

8.33 The total premium may be split into two components, saving premium going to the policy account and non-saving premium going to general reserve of the company. The split to be set at the outset may be varying by age, premium pay term and policy term or any other relevant factors approved under the File and Use.

8.34 The company to pay off for the expenses, commission, cost of insurance, cost of capital and profit margins etc. from the general reserve.

8.35 The saving premium to go to the policy account which will be credited a return at regular intervals may be annually or more frequently. The rate of return may be linked to the chosen index and the spread between the index return and crediting rate could be subject to minimum and maximum limits. The rate of return to the account could also be subject to minimum of zero in case Index returns show de-growth.

8.36 The underlying Index could be G-sec Index or any other Bond Index.

8.37 The minimum benefit at maturity date to be the account value and in case of early death the benefit to be sum assured/the account value subject to minimum as required by the product regulation 2019.

8.38 In case of early surrender, the surrender value to be the reduced surrender value of the cash value of the policy account balance as per the approval of the product to avoid the impact of adverse market movements on early surrenders.

8.39 The other boundary conditions for the product like premium term, policy term, annual premium, sum assured, lapse, revival, loan will be in accordance with the Product Regulation 2019.

Product Structure 2 – Variant 2

8.40 The product may offer single index or combinations of indices and it may include equity indices as well. However, if equity indices are included, a suitable investment strategy which might involve hedging may be put in place to manage the minimum return guarantee on policy account.

8.41 A regular withdrawal may be allowed, fixed at outset, from the policy account without any market value reduction.

8.42 The minimum death benefit could be set as sum assured plus value of the policy account or the benefit could be the higher of the two.

Suitability for the Customers and Disclosures

8.43 This type of product structures may need benefit illustration similar to ULIP Products. However, the benefit illustration may contain demonstration of expected returns at the rate of interest rates which could be the average return under the benchmark index over a period of 3 to 5 years, in addition to the interest rates as decided by the authority.

8.44 The website of the insurer to show the expected returns at maturity based on the trends of returns under the specified benchmark or their mix. Potentially, the customer should be able to create his/her login and see the actual/expected returns under his/her policy. In case of combination of indices, the rate of return to be based on the weightage average of such indices.

Product Structure 3 – Variant 1

8.45 By design this structure may be same as for Product Structure 2 but here 100% of the premiums could be credited to the policy account and charges for the cost of expenses, commission, cost of insurance, cost of capital and profit margins to the shareholders may be explicitly deducted, regularly from the policy account.

8.46 The policy account may be credited a minimum guaranteed return regularly subject to a minimum of non-zero positive return irrespective of the performance of the underlying Index. Additionally, the policy account may be credited a non-zero positive variable return as well at regular interval - annually or more frequently, which will be linked to a specific index.

8.47 The insurer may have the flexibility to set a non-zero positive minimum floor and a cap on the variable rate of return irrespective of the performance of the underlying Index.

8.48 The underlying Index could be G-sec Index or Bond Index.

8.49 The minimum benefit at maturity date will be the account value and in case of early death the benefit will be sum assured /the account value subject to minimum as required by the product regulation 2019

8.50 In case of early surrender, the surrender value will be such value as approved in the File and Use. The surrender penalty may be allowed to be charged during say first 5 years to recoup initial expenses and other costs.

8.51 The other boundary conditions for the product like premium term, policy term, annual premium, sum assured, lapse, revival, and loan will be in accordance with the Product Regulation 2019.

Product Structure 3 – Variant 2

8.52 The product may offer single index or combinations of indices and it may include equity indices as well. However, if equity indices are included, a suitable investment strategy which might involve hedging may be required to be put in place to manage the minimum return guarantee on policy account.

8.53 A regular withdrawal may be allowed, fixed at outset, from the policy account without any market value reduction.

8.54 The minimum death benefit could be set as sum assured plus value of the policy account or the benefit could be the higher of the two.

Suitability for the Customers and Disclosures

8.55 In general, it may be suitable for customers who are willing to take risks and understand risks/complexity but demand transparency.

Investment of Fund

8.56 Since this is a non-linked traditional plan, the investments of the underlying fund should be subject to the investment regulations as required for the controlled fund.

8.57 Further the variable return for the policy account will be linked to the external Index and not directly linked to the performance of the underlying investments. Therefore, within the regulatory limit the insurance companies could decide to invest outside the underlying Index subject to their stated risk appetite.

Valuation of assets and liabilities

8.58 Since this product falls under the category of non-par traditional plan, the investment will be valued in the same way as controlled fund.

8.59 The approach of liability valuation will be same as for non-par traditional plan i.e., gross premium valuation. The maturity, death and surrender benefits should be projected to the future date taking into account the value of the accumulated saving premiums as on the valuation date and the future expected return of the underlying Index and then discounted at valuation discount rate to the valuation date. The per policy reserve should be minimum of the surrender value. Consistency should be ensured between the Index return assumptions used for projection and the best estimate valuation discount rate.

Indexed Linked Annuity Plans

Product Structure 1- Variant 1

8.60 The following structure is applicable only for annuities with return of purchase price option.

8.61 Here, beside certain minimum guarantees, the annuity rate could be re-set at fixed/pre-disclosed time intervals in line with an index or G-sec yields. This re-setting mechanism may warrant lesser prudence at the time of pricing annuities and reduces risks for insurers and may also increase customer value.

8.62 For example, the annuity rate could be reset say after every 10 years with reference to the 10-year G-sec index or with reference to the 10-year G-sec yield. There might be certain pre-determined/pre-disclosed spreads that might be applied to index levels or G-sec returns in arriving at the annuity rates.

8.63 The suitable Index for such reviewable annuity rates could be a liquid 10-year G-Sec bonds or bond yields.

8.64 The spread between the rate of return on Index or level of Index and the annuity rate, for pricing the annuity could be determined at outset by the Appointed Actuary and approved in File and Use and this could be subject to some cap.

8.65 There should be certain minimum level of guarantee for the reviewable annuities so that the annuity payments would not fall below a level irrespective of the performance of the index.

8.66 In case the policyholder finds the annuity rate unattractive at the reset date, policyholder may be allowed to exit by transferring the purchase price to any other annuity option of the same provider or other providers at the reset date. Also, an option can be provided to the policyholders to de-link the annuity rates with the Index at the reset date and switch to other form of annuities at prevailing rates. This would make the product more flexible for the customers without any additional risk to insurers.

8.67 Also, to match customer life cycle needs, the product could also allow accumulation of due annuities at the benchmark rates, which could be withdrawn by the annuitant at his choice matching the individual life cycle needs. Top Ups of annuities can be allowed too to facilitate customers to increase the future amount of annuities in line with the inflation or lifestyle changes and needs.

8.68 For the avoidance of doubt, the only annuity option suitable for the above structure is annuity with option of return of purchase price on death under Individual or Joint life annuities. The other conditions including surrender benefits would be as per the Product Regulation 2019.

Product Structure 1- Variant 2

8.69 Here, the annuity rates could be fully variable and may change as the value of the index changes or it could be a combination of the guaranteed annuity rates and variable annuity rates. Therefore, an option can be given if policyholder who may want X% of the purchase price to have guaranteed non-reviewable annuity income and rest of the (1-X) % would be reviewable and liable to be reset as per the level of the Index annually.

8.70 The underlying indices could be a single index or combinations of indices. It could include the equity indices also subject to maximum exposure to equities as required by the investment regulations.

8.71 The other conditions including surrender benefits would be as per the Product Regulation 2019.

Product Structure 2- Variant 1

8.72 Here, both immediate and deferred annuity plans are under scope. During the deferment period the design could be similar to that recommended for non-linked insurance products. However, after deferment, earlier mentioned annuity designs would apply.

8.73 The other conditions would be as per the Product Regulation 2019.

Suitability for the Customers and Disclosures

8.74 The biggest criticism of annuities is that money their being locked for lifetime and also that annuity rates do not change during the payment term so it does not reflect the change in market conditions after the purchase of the plan. The above recommended designs could address these objections and hence facilitate achieving right balance between the risks and needs of customers.

8.75 These designs may be transparent and simple to understand as they transparently explain how the annuity rates are determined and how they would vary with changes in the underlying market index.

8.76 It may give policyholder an option and opportunity not only to take fixed rate or variable rate but also to switch the money to any desired option at a later date at prevailing rates out of the then available options.

8.77 The benefit illustration of such annuities should clearly show the change in annuity rates corresponding to two specified benchmark rates for say up to age of 100 years. The illustrations should clearly state the options available to the policyholder at the reset date.

Investment of Fund

8.78 Since this is a non-linked traditional plan, it should be subject to the investment regulations as required for the investment of the controlled fund as applicable for annuity and pensions.

8.79 The underlying investment strategy including any mis-match strategy should be in line with the individual insurer's risk appetite and policy in this regard.

Valuation of assets and liabilities

8.80 Since this product falls under the category of non-par traditional plan, the investment will be valued in the same way as controlled fund.

8.81 The approach of liability valuation will be the same as for non-par traditional plan i.e., gross premium valuation. In the GPV calculation, the projection rates assumed to project future annuity payments should be consistent with the valuation discount rate.

Indexed Linked Protection Plans

8.82 The sum assured for long term protection plans, could be allowed to grow in line with an inflation index or at a pre-determined/pre-disclosed rate to maintain the real value of the protection cover.

8.83 This can be allowed for regular premium policies and as sum assured increases in future years in line with inflation or based on any other formula, the future premiums will also increase.

8.84 The companies could be allowed to cap the maximum increase in sum assured say at 100% to contain the cost and keep premium rates affordable.

8.85 The product may have an option for the policyholder to opt out from indexed increased in sum assured and premium and it that case the policy will continue for rest of the outstanding term at the then existing levels by sum assured as well as premium. In case of deflation, the sum assured will not reduce from the current level but will remain at the same level.

8.86 The benefit illustration of such products can show the change of benefits and the premium in line with the product design for the better understanding of the customers.

Suitability for Customers

8.87 The sum assured under term plans normally remains level for full policy term. This results in protection cover losing its real value if the inflation is high or volatile. The above recommended design will help customers to protect the real value of the risk cover.

Investment of Fund

8.88 Since this is a non-linked traditional plan, it should be subject to the investment regulations as required for the investment of the controlled fund.

Valuation of asset and liabilities

8.89 Since this product falls under the category of non-par traditional plan, the investment will be valued in the same way as controlled fund.

8.90 The approach of liability valuation will be same as for the non-par traditional plan i.e., gross premium valuation. In the GPV calculation, the increasing sum assured and premiums need to be allowed for, in line with the product design/condition. Also, consistency should be achieved between inflation rate assumed for projecting revised sum assured and the valuation discount rate where appropriate.

Recommendation specific to the Unit Linked Insurance Plans (ULIP) –

8.91 Under ULIPs, segregated funds tracking certain indices could be allowed by investing in assets in line with the particular index.

8.92 The indices could be bond index, equity index, commodity index or one or more combinations of them.

8.93 The rest of the product design, charging structure, minimum and maximum benefits, the boundary conditions on minimum and maximum premium, policy term or premium paying term and non-forfeiture conditions to be set according to the Linked Product Regulations 2019.

8.94 The underlying fund should be strictly invested in the chosen index or combination of indices as communicated and contracted with the policyholders.

8.95 This may require some allowance in the investment regulation where weight of any script among the constituents of the index required to align with the specified index under this product options leads to the sectoral or company level limit exceeding the prescribed levels by the investment regulations.

8.96 This could provide a good option to the customer who seek the returns comparable or in line with the ETFs and popular index such as Nifty Fifty and BSE etc.

9. Investments of Funds under Index Linked products

Investment Patterns-Regulatory Guidance

9.1 The current investment norms prescribed by the regulator requires the life insurers' funds to be segregated into largely three distinct fund categories: Life fund, Group and Pension fund and Unit-Linked fund. The investment regulations are applicable at these fund level and not at a product level. Accordingly, if a life insurer desires to launch an index linked product under the life or pension segment, it will be required to comply with the pattern of investment and exposure norms at a life or pension fund level, and not at a product level. The insurer may decide the investment pattern and exposure limits with a view to ensuring compliance at a fund level.

9.2 The current investment norms prescribe the pattern of investment as well as exposure limits on asset class, sector, investee group, and individual companies and the same will be applicable to the ILIP also. There is a minimum G-Sec holding (including investment in Approved securities) prescribed for life fund and pension fund at 50% and 40% respectively. Further, exposure norms and credit rating norms are applicable to all funds. Investment in any investee company is capped at 10% while investment in any investee group or sector is capped at 15% of the fund (except the banking and financial services sector). Further, investment in the promoter group of the insurer is capped at 5%. A minimum of 75% of the investment assets are required to be in securities which are rated AAA (including G-Secs).

9.3 Similarly, in case a life insurer decides to launch an index-linked insurance product under the unit-linked segment, it would be required to comply with the pattern of investment and exposure norms prescribed in the investment regulations at a SFIN level. Further, for the life funds and pension funds, investment in derivatives is currently permitted only to the extent of forward rate agreements, interest rate swaps, and Exchange Traded Interest Rate Futures and solely for the purpose of hedging risks associated with interest rate fluctuations on expected cash flows. Similarly, for index-linked insurance products too, hedging for the purpose of managing risks associated with interest rate fluctuations shall be permitted. However, it may be noted that the fixed income derivatives are not permitted for unit-linked insurance products. Further hedging using equity derivatives is not allowed under investment regulations.

Indices

9.4 Some of the popular indices of bonds and equities are given below. One or more of them can be referred for index linked products depending on the product design and regulatory approvals. This list may be updated from time to time.

Bond Indices

- **10Y G-Sec benchmark –** average daily traded volume approx. 10,000 – 15,000. Also, fortnightly issuance of 11,000 crs based on current issuance calendar. This may be a challenge to replicate if the benchmark is to be reset every year. So may have to work on the structure. Other tenors could also be considered – 5Y, 15Y, 30Y. FBIL published benchmark can be considered.

- **MIBOR –** a benchmark for overnight inter-bank call money market. Daily traded volume is around 11,000 crs. This rate usually moves between the RBI's repo rate and reverse repo rate, based on RBI's liquidity policy. Average MIBOR can be used as a benchmark for returns.
- **1Y Treasury Bill –** average daily traded volume approx. 500-1000. Also, weekly auction of 4,000 crs based on current issuance calendar.
- **1Y Bank CD / 1Y Commercial Paper –** While we see decent issuances in regular times, recent issuances have been very low from banks and NBFCs due to the liquidity surplus situation for banks and lower business volumes for NBFCs.
- **SBI Fixed Deposit Rate –** Need to analyse the correlation between SBI Fixed Deposit rates and GSec / AAA corporate bond yields for respective tenors; however historical data availability could be a challenge.
- **CRISIL Composite Bond Fund Index –** is a debt portfolio that includes a mix of government securities and corporate bonds rated AAA, AA+ and AA. This index currently constitutes 45% in government securities and 55% in corporate bonds and runs a duration of around 5.25.
- **NIFTY Composite G-Sec Index –** is a debt portfolio that includes government securities, constructed using the prices of top 10 (in terms of traded value) liquid government securities with residual maturity greater than 1 year and having outstanding issuance of over Rs.5000 crores.
- **NIFTY 4-8 yr. G-Sec Index –** is a debt portfolio that includes government securities, constructed using the prices of top 3 (in terms of traded value) liquid government securities with residual maturity between 4 to 8 years and having outstanding issuance of over Rs.5000 crores.
- **NIFTY 8-13 yr. G-Sec Index –** is a debt portfolio that includes government securities, constructed using the prices of top 3 (in terms of traded value) liquid government securities with residual maturity between 8 to 13 years and having outstanding issuance of over Rs.5000 crores.
- **NIFTY 11-15 yr. G-Sec Index –** is a debt portfolio that includes government securities, constructed using the prices of top 3 (in terms of traded value) liquid government securities with residual maturity between 11 to 15 years and having outstanding issuance of over Rs.5000 crores.
- **NIFTY 15 yr. and above G-Sec Index –** is a debt portfolio that includes government securities, constructed using the prices of top 3 (in terms of traded value) liquid government securities with residual maturity above 15 years and having outstanding issuance of over Rs.5000 crores.

Equity Indices

- **NIFTY 50 Index –** The NIFTY 50 Index is a diversified 50 stock index. The NIFTY 50 Index represents about 58.1% of the full market capitalization of the stocks listed on National Stock Exchange (NSE) as on August 31, 2020.

- **Nifty Next 50 Index –** The Nifty Next 50 Index represents 50 companies from NIFTY 100 after excluding the NIFTY 50 companies. The NIFTY Next 50 Index represents about 14.5% of the full market capitalization of the stocks listed on NSE as on August 31, 2020.
- **NIFTY 100 Index –** The NIFTY 100 Index is a diversified 100 stock index. NIFTY 100 represents top 100 companies based on full market capitalisation from NIFTY 500. The NIFTY 100 Index represents about 72.7% of the full float market capitalization of the stocks listed on NSE as on August 31, 2020.
- **NIFTY Midcap 50 Index –** The primary objective of the NIFTY Midcap 50 Index is to capture the movement of the midcap segment. NIFTY Midcap 50 includes top 50 companies based on full market capitalisation from NIFTY Midcap 150 index and on which derivative contracts are available NSE*. The NIFTY Midcap 50 Index represents about 5.6% of the full float market capitalization of the stocks listed on NSE as on August 31, 2020.

*In case 50 midcap stocks do not have derivatives contract available on them then it could have less than 50 stocks in the index.

- **NIFTY Midcap 100 Index –** The objective of the NIFTY Midcap 100 Index is to be a benchmark of the midcap segment. The NIFTY Midcap 100 Index represents about 10.9% of the full market capitalization of the stocks listed on NSE as on August 31, 2020.
- **NIFTY 200 Index –** The NIFTY 200 Index is designed to reflect the behaviour and performance of large and mid-market capitalization companies. NIFTY 200 includes all companies forming part of NIFTY 100 and NIFTY Full Midcap 100 index. The NIFTY 200 Index represents about 84.1% of the full market capitalization of the stocks listed on NSE as on August 31, 2020.
- **NIFTY 500 Index –** The NIFTY 500 Index represents the top 500 companies based on full market capitalisation from the eligible universe. The NIFTY 500 Index represents about 95.4% of the full market capitalization of the stocks listed on NSE as on August 31, 2020. Of the total 500 stocks in Index, 134 stocks has market cap less than INR 3,750 crores (US$ 500mn) and the weight of these stocks is approximately 1.9% in the Index.
- **NIFTY Small cap 100 Index –** The NIFTY Small cap 100 Index is designed to reflect the behaviour and performance of the small capitalized segment of the financial market. The NIFTY Small cap 100 Index comprises of 100 tradable, exchange listed companies. The NIFTY Small cap 100 Index represents about 3.5% of the full market capitalization of the stocks listed on NSE as on August 31, 2020. Of the total 100 stocks in Index, 30 stocks has market cap less than INR 3,750 crores (US$ 500mn) and the weight of these stocks is approximately 18.1% in the Index.
- **NIFTY Dividend Opportunities 50 Index –** The NIFTY Dividend Opportunities 50 Index is designed to provide exposure to high yielding

companies listed on NSE while meeting stability and tradability requirements. The NIFTY Dividend Opportunities 50 Index comprises of 50 companies. The methodology employs a yield driven selection criterion that aims to maximize yield while providing stability and tradability. The NIFTY Dividend Opportunities 50 Index represents about 23.2% of the full market capitalization of the stocks listed on NSE as on August 31, 2020.

- **S&P BSE SENSEX –** The S&P BSE SENSEX is designed to measure the performance of the 30 largest, most liquid and financially sound companies across key sectors of the Indian economy that are listed at Bombay Stock Exchange (BSE) Ltd. The S&P BSE SENSEX represents about 49.1% of the full market capitalization of the stocks listed on BSE as on August 31, 2020.
- **S&P BSE 100 Index –** The S&P BSE 100 Index is designed to measure the performance of the 100 largest and most liquid Indian companies within the S&P BSE Large/Mid Cap space. The S&P BSE 100 Index represents about 70.0% of the full market capitalization of the stocks listed on BSE as on August 31, 2020.

10. Conclusion and Recommendations-

10.1 The purpose of the report was to deliberate on various issues as contained in the Terms of Reference for the Working Group in order to submit recommendation on ILIP designs to the authority.

10.2 Based on multiple discussions and analyses, the WG realized that the complex or high level ILIP products can bring about more complexity and hence the recommended approach is to start with simple designs termed as Variants 1 in the report where indices are linked to simplest indices e.g., possibly fixed/G-Sec income linked or Nifty fifty type indices (where indices are liquid and also popular/well understood).

10.3 Under the variant level 1, the products are simpler where benefits are linked to one single index. Any further variations including combination of indices are used are proposed under Variants 2 and above. This is to ensure that the journey of onboarding for the ILIPs starts with simpler version of products so that learnings from there can possibly be incorporated before moving towards more complex ILIP product designs.

10.4 In order to have more detailed understanding of the issues and challenges, the WG had several rounds of meetings with various stakeholders at individual and group level including with Appointed Actuaries and Product Heads. These meetings were highly useful in back testing and validating the group's thought process and approach. The WG felt that this report is a fair reflection of all the thoughts and concerns of these various stakeholders.

10.5 After many rounds of discussions and presentations, WG decided that the product structures are to be mainly proposed under conventional par and conventional/universal life type non-par designs.

10.6 The purpose of par and non-par is to give options to customers. While under non-par (universal life type) design, since the enhancement in value will only happen to the allocated premium i.e., the premium received net of the pre declared charges or sum assured, the accumulation rate linked to the index has to be higher. However, under the conventional non-par and par since expenses and margins have also to be recovered from the returns of investment, the respective value and the range of the accumulation rate with reference to the index can be wider. These structures and issues related to the same have been detailed in the respective Sections.

10.7 For the annuity product with return of purchase price, the recommendation is to allow resetting of annuity rates with reference to a specified index on top of the minimum stipulated guarantees at stated periodicity. The customer concerns are be taken care of with a properly disclosed benchmark index besides offering the customers a choice to change the annuity option, to switch the full amount to to other form of annuities or opt for open market option. This will reduce the risks for insurers as well as enhance the customer value and options for the annuitants and pensioners.

10.8 The working group recommends that under ULIPS a segregated fund may also be allowed to be offered as an option with an option to invest in assets confirming to a chosen index. However, this may require some allowance in the existing investment regulations such as permission to invest beyond stock level limit and sectoral limit to allow for a scenario to the extent required to align with the asset composition of the stated index.

10.9 Benefit disclosures have to be attuned to the nature of products and their level of complexities. However, a balance has to be ensured between the level of information and its objective. Some of the things to be ensured by insurers would be to display in their websites the past trends of investment return under the suggested indexes and allowing the trackers in the websites showing how the index returns are moving with time and showing calculators of likely returns in the funds of the customers which though may be moving with times. In the Customized benefit illustration benefit flow under a return rate based on past performance of 3 to 5 years may be added besides the 4% and 8% rates or as decided by the authority. Ones the structure are finalized the actual shapes of Customized benefit illustrations can be worked out. However, these need not be much different from the current except few modifications and additions to avoid plethora of confusing details. It is envisaged to ensure minimum changes in the regulations and allowing pay-outs such as on surrender, death, risk cover etc., to be compliant with respective regulations.

10.10 The group is of the view that it would be a welcome step to allow the Indexed Linked Insurance Products with benefits linked to the index or mix of indices. However, the group also shares the concerns of the Authority that such products are launched only after giving due consideration to issues around transparency and appropriate disclosures. Also, that there has to be an appropriate level of disclosures in proportion to the nature of the designs. Recommended approach is to have an efficient and effective transmission of information and details in a transparent manner appropriate to the degree of complexity in the product design.

All the members of the working group are highly thankful to the Authority for bestowing this important responsibility and faith in them. The group has worked with full dedication and commitment in preparing this report after several rounds of discussions and interactions. The group submits this report for the consideration of Authority duly recognizing that there may still be some more work needed to be done which can be undertaken once the broader concepts are accepted.

The working Group once again convey its hearties thanks to the Chairman and Member (Life) along with all other senior officials of the Authority for their initiative for formulating and empowering this group to prepare this report. The group presents this report with immense pleasure for the consideration of the Authority.

This report on the Index Linked Insurance Products submitted on the 15th day of December 2020.

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