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PMJJBY – Towards Universal Life Cover

The Government of India introduced “Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY)” scheme in February 2015. It is an insurance scheme aimed to provide term insurance cover of Rs. 2 lacs at a nominal premium of Rs. 330 for people in the age bracket of 18 yrs to 50 yrs.

This article aims to analyse, from a risk perspective, the opportunities and challenges presented to the Indian insurance industry by the scheme. It further deliberates on the possible mitigations that could be taken by the insurance companies to effectively manage the risks.

Background

Following the success of Jan Dhan Yojana (a National Mission for Financial Inclusion to ensure access to financial services), the Government of India announced three ambitious social security schemes under the ‘Jan Suraksha’ initiative. As per the Ministry of Finance’s statistics ^[1], only 20 per cent citizens have Life Insurance, 11 per cent workers have Pension Schemes, and only 4 per cent citizens have Accidental Insurance. The objective was to provide affordable protection solutions in a convenient and hassle free manner to the masses especially the poor and rural population.

Prime Minister Shri. Narendra Modi launched Pradhan Mantri Suraksha Bima Yojana (PMSBY), Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY) and Atal Pension Yojana (APY) on May 09, 2015 at an event in Kolkatta.

In this article, we take a closer look at the Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY).

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PMJJBY is a one year cover, renewable from year to year, Insurance Scheme offering life insurance cover for death due to any reason. The scheme is offered / administered through LIC and other Life Insurance companies willing to offer the product on similar terms with necessary approvals and tie ups with Banks for this purpose. Participating banks are free to engage any such Life Insurance Company for implementing the scheme for their subscribers^[2].

Highlights of the Scheme

Scope of coverage

All savings bank account holders in the age 18 to 50 years in participating banks will be entitled to join. In case of multiple saving bank accounts held by an individual in one or different banks, the person would be eligible to join the scheme through one savings bank account only^[2].

Enrolment Period

Initially on launch for the cover period 1st June 2015 to 31st May 2016, subscribers were required to enroll and give their auto-debit consent by 31st May 2015. Late enrollment for prospective cover was available up to 31st August 2015. Those joining subsequently are permitted to do so with payment of full annual premium for prospective cover, with submission of a self-certificate of good health in the prescribed proforma^[2].

Enrolment Modality

The cover is for one year period stretching from 1st June to 31st May for which option to join / pay by auto-debit from the designated savings bank account on the prescribed forms will be required to be given by 31st May of every year, with the exception as above for the initial year^[2].

New entrants into the eligible category or currently eligible individuals who did not join earlier or discontinued their subscription shall be able to join while the scheme is continuing, subject to submission of self-certificate of good health^[2].

Benefits

Rs.2 lakhs is payable on member's death due to any reason^[2].

Premium

Rs.330/- per annum per member. The premium is due to be reviewed based on annual claims experience. However, barring unforeseen adverse outcomes of extreme nature, efforts would be made to ensure that there is no upward revision of premium in the first three years^[2].

Termination of Assurance

The assurance on the life of the member shall terminate on any of the following events and no benefit will become payable there under:

1. On attaining age 55 years.
2. Closure of account with the Bank or insufficiency of balance to keep the insurance in force.
3. In case a member is covered under PMJJBY through more than one account and premium is received by LIC / other company inadvertently, insurance cover will be restricted to Rs. 2 Lakh and the premium shall be liable to be forfeited^[2].

Master Policy Holder

Participating Banks will be the Master policy holders^[2].

PMJJBY is in essence, similar to a group term life assurance plan renewable on an annual basis with life coverage of Rs. 200,000 at a level premium of Rs. 330.

Pricing Dynamics

Life Insurance companies, when pricing for Group Insurance schemes (more specifically, one year renewable group term assurance schemes), have traditionally used the following criteria to arrive at a premium rate for the group:

- Age of the member
- Gender
- Occupation class
- Sum Assured level

Depending on the industry to which the group belongs, insurance companies either load or discount the member wise rates thus identified and calculate the premium payable by each member of the group. Summing up the individual premiums, a single per mille rate for the total Sum Assured is then arrived.

However, in PMJJBY a single rate has been prescribed for any savings bank account holder who approaches a participating bank for enrolment into the scheme; the premium is no longer dependent on population demographics such as age, gender, occupation, education, income levels, etc. This is not as per the usual pricing pattern followed by life insurance companies for group products.

Enrolment & Claims Status as on September 2015

As on September 30, 2015 a total of 2.82 crore enrolments have been made by 42 participating banks having tie-up with 10 Life Insurance companies. Further, 4,232 claims have been lodged under the scheme till September 30, 2015.

Table 1: PMJJBY Month-wise enrolments

Month	Cumulative Polices Issued	Cumulative Claims Received
June 2015	26,368,590	139
July 2015	27,140,420	1,142
August 2015	27,774,823	2,605
September 2015	28,209,024	4,232

Source: Jan Suraksha website, Report September 30, 2015^[3]

With four months having elapsed since the scheme was made operational on June 01, 2015, the enrolments have stabilized, however, number of claims lodged under scheme show an upward trend and hence too early for analysis.

Risks

Since this is the first time this type of an insurance scheme is being taken up on such a large scale, it would be interesting to analyse various risks associated with the scheme.

Major Risks

- 1) Adverse death claim experience leading to cost over-run for insurance companies
- 2) Misuse of the scheme by unscrupulous elements
- 3) Subscription of multiple policies by the same subscriber with variation in name

Let us look at each of these risks and probable mitigation strategies in detail:

1. Adverse death claim experience leading to cost over-run for insurance companies

Premium charged under the scheme is Rs. 330. However, after allowing for commission, admin fees to the participating banks and stamp duty, only Rs. 249 is available to the Insurance companies to cover mortality and other operational expenses. Table 2 depicts the expense break up :

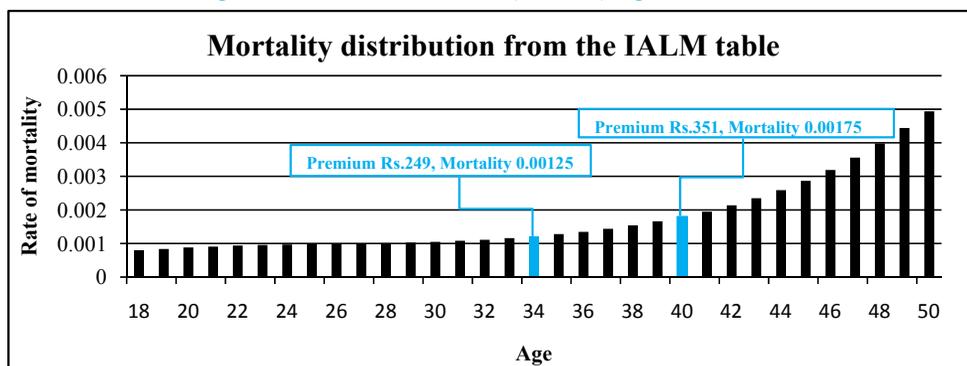
Table 2: Expense break-up

	Amount (Rs.)
Premium Prescribed	330
Reimbursement of expenses to Agent	30
Reimbursement of Administrative expenses	11
Stamp Duty	40
Residual premium to cover Mortality charges & other Operational costs	249

Source: PMJJBY Rules from Jan Suraksha website ^[3]

Life insurance companies use the IALM 2006-08 ^[4] tables to price their products, the same can be considered as the model indicator of mortality. Figure 1 shows the distribution of deaths as per IALM table for the age group of 18-50:

Figure 1: IALM distribution (2006-08) Age 18 – 50



The average rate of mortality for this age group (i.e. 18 yrs – 50 yrs) is 0.00175, which corresponds to the age of 40. Now ideally, the premium to be charged would be calculated by multiplying this rate by Rs. 2 lakhs (i.e. risk cover) and adding the commission and administration fees plus stamp duty. Doing so gives us a premium of Rs. 432. Table 3 illustrates the same

Table 3: Expense break-up for break even

Mortality rate for a 40 year old life	0.00175
Risk cover / sum assured	Rs. 2,00,000
Basic Premium amount	$0.00175 \times 200000 = 351$
Commission	30
Admin fee	11
Stamp Duty charges	40
Total premium	432

However, the companies can charge only Rs. 330, hence on an average basis, the industry is getting the mortality rate of a 34.5 year old,

$$\text{i.e. } 0.001245 [(330-30-11-40)/200000]$$

Whereas, the age corresponding to the average of the mortality rate for the group is 40 years. Hence, the industry would break even, if the actual average age experience of group is closer to 34.5 years. Purely on the basis of mortality rates (for ages 40 years & 34.5 years), there is a difference of 0.000505 (0.00175 - 0.001245).

Table 4: Actual & Projected enrolments

Month	Cumulative Policies Issued
June 2015	26,368,590
July 2015	27,140,420
August 2015	27,774,823
September 2015	28,209,024
October 2015 (Projected)	28,773,204
November 2015 (Projected)	29,337,385
December 2015 (Projected)	29,901,565
January 2016 (Projected)	30,465,746
February 2016 (Projected)	31,029,926
March 2016 (Projected)	31,594,107
April 2016 (Projected)	32,158,287
May 2016 (Projected)	32,722,468

The above shows that total enrolments till September 30, 2015 is 2.82 crs. For the remaining 8 months (i.e. October 01, 2015 till May 31, 2015), enrolments per month have been projected using a simple growth of 2% per month, i.e. around 5.5lakh policies are added every month which is as per the growth trend of September 2015 over August 2015.

This converts to an overall gap of Rs. 363 crores to the industry in premium from the scheme assuming that a total of 3.27 cr, (Table 4) people enroll themselves into the scheme by end of May 2016.

In this context, it may be noted that the Life Insurance Council (an association of the life insurers) has asked for waiving off the stamp duty component of Rs. 40 ^[5], which would increase the net premium from Rs. 249 to Rs. 289. In event of the waiver, industry shall get compensated to the tune of Rs. 131 crs with a gap being reduced to Rs. 232 cr.

Also as a further risk mitigation measure, the Life Insurance Council, has appealed to the Insurance Regulatory & Development Authority of India (IRDAI) for 50% concession in re-insurance rate on PMJJBY, arguing its members face losses as the premium may not cover costs ^[5].

2. Misuse of the scheme by unscrupulous elements

There has been an increasing trend in the number of policies identified as fraudulent in nature – both at issuance as well as at the claim stage. During issuance, dead man insurance (i.e. proposal submitted on deceased persons) poses a major threat simply because of the difficulties associated with ascertaining such cases. Analytics can play a huge role here, if we can identify common customer profiles or intermediary traits prevalent in identified dead man insurance cases, this data can be utilized to flag potential risks.

Submission of improper/fake ID or income proofs closely follows dead man insurance cases. This has led to a rise in the number of fraudulent claims. Possible mitigation strategies here include linking of AADHAR cards to bank accounts, stringent measures taken to validate Voter ID and PAN cards.

The risk of fraud could be mitigated by developing strong risk analytics and combine the same with innovative investigation.

3. Subscription of multiple policies by the same subscriber with variation in name

A third problem specific to PMJJBY would be multiple death claims across different banks for the same policyholder with variation in name or aliases. To manage this risk, a claims repository has been created. The repository is managed by CIBIL and all participating insurers are required to update the claims received under the scheme.

This has to a large extent mitigated the risk of multiple claims on the same life. However, adequate precautions should be taken while conducting de-dupe of the claims repository before payout.

Other Risks

4. Critically ill / Substandard lives being covered.
5. Anti selection for rural and / or female lives.
6. Mis-statement of age (insurance taken for persons beyond 55 yrs of age) and other critical information.
7. Absence of KYC checks by Insurers / Banks.

Way forward/ Conclusion

- 1) Since PMJJBY is a social security scheme, banks and insurance companies have to mandatorily enroll everyone with a bank account into the scheme. One way to approach such schemes in the future would be to solicit policies based on the banking profile of the customer viz. the average term of account held in the bank or the average bank balance over the past couple of years, etc. – this way we can eliminate the risk of adverse selection.
- 2) Another approach would be to apply differential pricing either with respect to age, gender, occupation, or location of the policyholder after taking into consideration the claim experience of the current group at the end of the first year.
- 3) Risk Analytics to identify possible fraud cases – demographic, and socio economic trends may be analysed and mapped. Data integrity and collaboration amongst all insurers would form a critical enabler for the analysis.

PMJJBY scheme has the potential to be a game changer for the both the Indian Insurance Industry and the masses who have a critical need for adequate life insurance cover. The need for insurance cover to socially backward and deprived sections of the society should be balanced with the scheme being economically viable for the insurers.

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