Credit Life Insurance (Group A)

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ABSTRACT

This paper discusses the current situation of credit life insurance in India, different possible benefit structures of Credit Life Insurance, methods of distribution, pricing and valuation issues. It then briefly discusses the scope to extend the concept to micro insurance and its social relevance. A few case studies are also included at the end of the paper.

KEYWORDS: Credit Life; Insurance; Disability; Anti-selection; Loss Ratio; Micro Credit

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1. Introduction

Credit Life insurance is becoming popular in India. It is a very useful tool for all parties involved in the transaction. For the loan providers it provides protection in recovering the loan in case of the unfortunate death of the borrower. Also, it assists the family of the borrower by repaying the loan allowing them to retain the asset (e.g. house or car) without putting financial pressure on them during a time of bereavement. There are also benefits for the insurer such as lower distribution costs, potentially less anti-selection and, depending on the product, better mortality experience. Beneficial to all the parties, Credit Life Insurance is all set to grow big in the Indian insurance market and may expand into new areas and cover just about any loan.

We aim to discuss in this paper, the different possible benefit structures of Credit Life Insurance, methods of distribution, pricing and valuation issues. A few case studies are also included at the end of the paper.

2. Current situation in India

Credit Life cover is provided primarily for death cover in India.

The products are sold to cover mainly mortgage and car loans. There are some products covering credit card balances. Some companies are trying to cover personal loans and other types of loans but it is still not very prevalent in the market.

The credit life cover is mainly provided through group products in India. There are some individual policies also in the market covering mortgage business.

Distribution is predominantly through bancassurance. Other methods of distribution, though not very popular, are direct sales force and direct marketing.

3. Product Structure

Single premium contracts are popular. Typically the bank/loan provider adds the single premium to the loan amount and recovers the same in installments. This gives the company some additional profit from financing the money in addition to the commission on the premium. It is also administratively simpler for the bank. It does however provide less flexibility in that the loan schedule has to be fixed upfront.

The other option is regular premium. This is mostly for group plans and the premium is usually paid by the bank/loan provider. This is part of their risk management to ensure recovery of the loan in the case of death of the life assured.

The cover is usually decreasing. The loan schedule is usually fixed at outset for the purpose of life cover using an assumed rate of interest and the claim will be settled on that basis irrespective of the actual outstanding loan amount. This is done basically to

avoid administrative hassle of keeping track of outstanding loan for the purpose of life cover and so that premium adjustments are not necessary if there are variations in the sum at risk.

Some companies are also offering level cover. In this case, after the outstanding loan is paid from the death benefit, the remaining money goes to the dependants of the life assured.

In the case of any top up loans or rescheduled loans, either a pro-rata premium based on the existing cover is applied or the new premium is calculated afresh based on all the risk factors. The former approach is easier to explain to the borrower and simpler to administer, however it is deficient in that it does not allow for the ageing of the life assured.

4. Benefit/Premium Combinations

The following are the various combinations of benefit/premium depending on the need of the life assured:

- 1. Level Sum Assured/Level Premium this is a good option if the beneficiary is not the bank as there will be some additional benefit available after the settling of the loan
- 2. Increasing Sum Assured/Increasing Premium: this is a good option if the beneficiary is not the bank and the insurance need (in addition to the mortgage) will increase over time
- 3. Level Sum Assured/Single Premium: administratively simple
- 4. Decreasing Sum Assured/Single Premium: also administratively simple and the decreasing term structure provides for the cheapest form of cover as there is no "excess" benefit
- 5. Decreasing Sum Assured/Limited Premium Payment Period: the payment period is limited to ensure that the future benefits are never less than the future premiums

5. Distribution methods

The main distribution channel is bancassurance. This is natural as the credit is usually offered by banks. Also it becomes easy for banks to sell insurance by showing it as an additional benefit. The benefit for the bank is that it increases their income.

Another distribution method is selling through the direct sales force. Mainly, the mortgage protection policies are sold through this channel.

Direct sales is an option but not very popular yet for this type of business. This can be done through a call center from which the borrowers can be contacted and the cover offered.

Another direct selling method is through direct mail. A mail will be sent to the borrower giving the benefits and details of cover. But the conversion ratio s have been historically low in this type of selling as the customer doesn't come back on his own, without any extra push. Remember, insurance is sold, not bought, even if there is lot of benefit to the customer.

Another option is to sell the cover through the internet. This is not yet very popular mainly because the internet is still predominantly an urban phenomenon. Also, the internet is more popular with younger people who tend to be less concerned about insurance. But the trend is fast changing with older age groups becoming more technologically savvy and so the internet could become a major distribution channel in future.

An alternative approach is to make insurance compulsory for anyone taking the loan. This would really be beneficial to all the parties involved from a protection point of view. But this could put extra burden on the borrower from a financial point of view. Also could limit the choice available to the borrower as the loan provider would fix who should give the cover.

Sales Model	Description	Participation rates	Examples
1. Automatic	Customer seeking loan must purchase insurance to get the loan	100% Most regulators do not allow this practice.	Japan, Mexico
-	Customer selects the loan and is offered the insurance by loan officer or CSR	10-75% depending on the market	Canada, US, Spain, Australia, HK, Italy
3. Insurance Agent	Bank branch has licensed agent who makes the sale	10-70%	India, US, South Africa, Australia
4. Use Call Centre	Bank has access to call centre that make the insurance sale	3-7%	US, UK, Australia
5. Direct Mail	Customer mailed package after the loan application is complete	0.5-3%	Canada, US
6. Web	On-line applications with simplified underwriting – instant approval	Less than 1%	Canada, US, UK

The following is a table of various sales models and participation rates with examples of the usage of sales model in different countries:

6. Underwriting

Underwriting is a very crucial aspect of this product. The underwriting is different for this product because of the following factors:

- ? The reason for insurance is a loan. Hence anti-selection is limited, as the primary reason for taking the loan is not for the insurance cover.
- ? Usually, the borrowers of the loan will have some financial standing and some minimum level of income.
- ? The loan provider will check the credentials of the loanee before giving the loan. This can be called a preliminary underwriting.

Up to a certain limit, the underwriting is simplified. It is either a declaration of health or some questionnaire (short or long). Beyond the limit, the proposal will go for full individual underwriting. The underwriting limits are fairly high especially for mortgage and motor loan business as the scope for anti-selection is less, and lives covered are usually from a high income group.

In North America simplified underwriting is used up to face amounts of US\$150,000. In India, the limit could vary from INR 5 lacs to 20 lacs depending on the product as well as the distribution and the age of the life assured.

Simplified underwriting usually consists of 5-7 medical questions. If all are answered 'no', the application will go through clean. If a 'Yes' is recorded for any one question, the application is passed on to an underwriter for further underwriting.

7. Pricing and Profitability issues

As is the case with any product, the pricing is directly linked to the underwriting. If underwriting is liberal, price should be high and vice versa.

There are many factors that should be taken into account while pricing this product. As stated already, underwriting is a most important factor. Another important factor is the loan provider. If the loan provider has a good customer base with high income, located in areas that have access to medical facilities, the mortality experience is going to be better.

As discussed earlier, the scope for anti selection is less as the reason for taking insurance is to cover any outstanding debt. However there is still some scope for anti-selection as the cover is of a voluntary nature. Anyone with some doubt about their health would obviously opt for the cover and this should be factored into the pricing. Underwriting would limit this possibility to a great extent but having less detailed underwriting does make the process of declining any suspicious claims more difficult.

Fixing the mortality basis for this product is still a challenge as there is not enough experience for this product. And there are many factors working both ways.

The biggest challenge in fixing the mortality basis is the spread of the customer base of the loan provider. Some of them are in metros and many of them are in 'B' and 'C' cities and some of them are in villages. Hence, the y have different living conditions. So, the target group for this product may appear homogeneous at a first glance, but there may be a lot of heterogeneity in it.

The other issue is the quality of underwriting. The majority of the policies will get through the declaration of health or simple questionnaire. Also this form is often completed by the loan provider. Hence it is possible that the loan provider encourages the customer to say 'no' to all the questions in the questionnaire so as to enable him to get the insurance. Proving non-disclosure at claims stage is not easy.

Also, insurance cover may make the loan provider more liberal about granting the loan. For example, he/she may be less concerned about granting a loan to a person who is not in good health.

'Rash driving' is an issue with motor loans. There are no records to keep track of driving history in India. Hence, the rash drivers could anti-select against the life company in choosing the cover given the voluntary nature of the cover. Of course, we would agree with those who would argue that it is still not of a big issue in India thanks to the bad roads. But we can probably agree that it could become an issue in future. Furthermore one may find that those who have a more risky attitude towards driving are those that are generally risk takers and would be less inclined to insure themselves.

Assessing the nature of credit life groups other than mortgage and motor is a bigger issue. For example, credit card holders. A credit card holder who availed maximum credit need not necessarily have maximum income. In fact, it could work the other way round. The borrowers may be from different locations, with different levels of income, with different life styles and many other differences are possible. Hence assessing the risk of these borrowers is not easy.

Calculating the expense loading is also not simple. More administration is involved due to the varying nature of cover and this should be allowed for in the expense loading. The administration system should be efficient enough to keep track of the decreasing cover based on the agreed loan schedule. Mis interpretations are possible as the actual outstanding loan amount at the time of claim could be different from the amount mentioned in the loan schedule at the time of taking the cover. It is therefore important to ensure clear communication between customer, loan provider and insurer.

The expense loading is one area where companies can be more flexible and follow a strategy to make themselves more competitive in certain segments. For example, you may decide to be more competitive at younger ages and hence load expenses accordingly. However, the overall objective should be to recover expenses and assumptions regarding sales volumes would be very important here. For example, you may load a lot for expenses for certain segments and if you don't get volumes from those segments, you

may end up not recovering expenses. It is always debatable whether to load less for expenses and get more volumes or load more for expenses and get less volumes. And both arguments have got advantages and disadvantages.

Early repayment of loan is another issue and would lead to administration hassles if the life assured doesn't want the cover any more. In the case of single premiums, the borrower would expect a portion of premium to be returned to him. Fixing the surrender value is an issue that needs to take care of many factors like anti-selection and decreasing cover. Anti-selection is an issue in case of a borrower deciding not to have cover when he thinks that the outstanding loan is small enough to be managed without an insurance cover. This is because the good lives usually opt out of cover leaving the relatively bad lives with the company. Also any surrender value fixed by the insurer is likely to be seen as small by the borrower as expenses and commission have to be deducted and hence may be challenged. The other option is to advise the borrower to continue the cover until the end of the term. This is the preferred option as it avoids the administration hassles of calculating and making refunds and also avoids the risk of anti-selection.

The general practice is that no premium would be refunded in case of a regular premium policy. However, this may lead to problems. What if the borrower repays the loan one day after he paid the insurance premium for the year? He would reasonably expect the entire premium to be refunded to him and would not be happy to know that he would not get any refund.

The profitability of the product is very sensitive to some of the assumptions. For example, if you charge a lot of surrender penalty and make a pessimistic assumption about surrenders, you may not make the required profit if the surrenders are less than assumed in pricing. This is referred to as a lapse-supported product. Would you then complain for not having enough lapses/ early repayments? Also this is one product whose experience is linked to the general economic environment in the country and hence can fluctuate with it. For example, the loan schedule may look totally different if interest rates fluctuate a lot, there can be many early repayments if there is a significant improvement in the economy. So sensitivity and scenario testing should be done thoroughly before finalizing the price of the product. It is important that the product does not overly depend on one source of profit.

There is scope for loading sufficient margins for profit. This is because the insurance premium as a percentage of total loan amount is negligible and hence customer may not bother to check if the premium is the lowest. This makes the relationship with the loan provider an important factor to get business for a life company rather than the price.

8. Experience & Reserving

It is probably too early to come to a conclusion on the experience of this product in India. However, if the experience so far is an indication, then it is good. Companies need to study the experience of this product separately and monitor the same on a regular basis. This would be essential as this product alone is projected to have lot of potential in future in India. And this would ensure to get the price for this product right and that in turn would hopefully help expanding the market for this product.

Reserving for this product becomes important if there are any changes that could impact the experience of the product in future. For example, if there is any change in the target market or any changes in the loan repayment trends it is important to keep track of the experience and make adjustment to the reserving. This should also help in deciding the timing and extent of any price changes.

Unlike many other life insurance policies, the solvency requirement for a credit life policy will come down with the duration of the policy if it is a decreasing term policy. This means capital would be released during the duration of the policy.

9. Scope for expansion to other loans

As of now, credit life cover is focused on the big loans. However, there is a great deal of scope to extend this to other loans, e.g. personal and business loans. These would require a different approach in terms of pricing and administration but do offer significant opportunity.

10. Micro Credit Insurance

This is one area where insurance can be of great benefit and serves the government's objective of taking insurance to the rural masses. There are many families in rural India who slipped below the poverty line by losing whatever little assets/money they have in repaying the loan after the death of the breadwinner. Insuring these loans (agriculture loans, cattle loans, tractor loans, etc.) would be very valuable to these families.

There are obvious issues in doing this. Assessing risk is a big problem. This needs a lot of research. Administration right from issuing the policy to the settlement of the claim is a bigger problem due to lack of infrastructure. And there are other problems like anti-selection, fraud, etc. There is a huge cost involved in doing this. But, will the benefit outweigh the cost? The answer is definitely 'yes' from a social point of view. But it will not last long if it is not self-supporting. So, the challenge is to make rural credit insurance profitable.

One way of helping achieve this is to take it to the rural masses on a large scale. Then the law of large numbers will take care of many of the issues involved in it. This can only be done by the combined effort of government, the regulator and the industry.

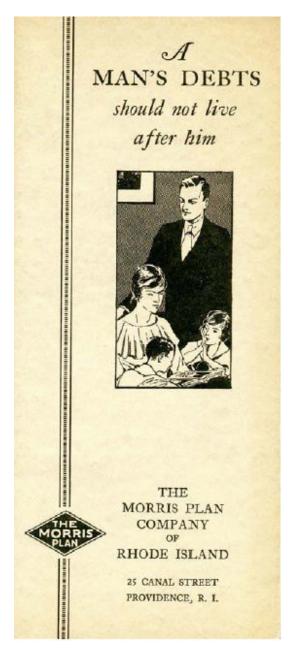
11. Case Study - US Model

1) The Establishment of Morris Plan Banks

In US before 1910, bankers would only lend to those who had deposits in the bank. This led Arthur J. Morris to develop an idea to lend money if the borrower could show the earning power to repay the debt. This idea led to the establishment of Morris Plan Banks.

2) The Establishment of the Morris Plan Insurance Society

Morris then realized that the death or disability of the borrower could hamper the borrower's earning power. This situation led Morris to develop the concept of credit insurance. In 1917, Morris established The Morris Plan Insurance Society, a credit insurance company with the motto, "A man's debt should not live after him."



3) Group versus Individual Policies

Before 1960, the industry was generally divided between insurers writing group business and those writing individual business. As group statutes became more liberal, credit insurers started writing more group business in order to benefit from the simpler administration procedures and special tax concessions. By 1970, 84% of all credit insurance was written under group business

4) Product sold

The four principal types of credit insurance are:

- 4.1. Credit life insurance
- 4.2. Credit disability insurance
- 4.3. Involuntary unemployment insurance
- 4.4. Credit property insurance insures property that is purchased with a consumer loan, or insures property that is offered to secure a consumer loan

5) Growth of Credit Life Insurance

Credit Life insurance has become very popular in the United States with the rising cost of consumer products. In several market segments, there is a demand for credit related insurance in amounts similar to ordinary insurance.

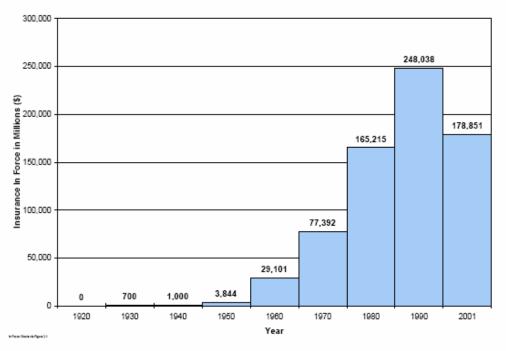


Figure 2.1 - Growth of Credit Life Insurance in the United States (1920-2001)

(Source: An introduction to Credit-related Insurance by Gary Fagg)

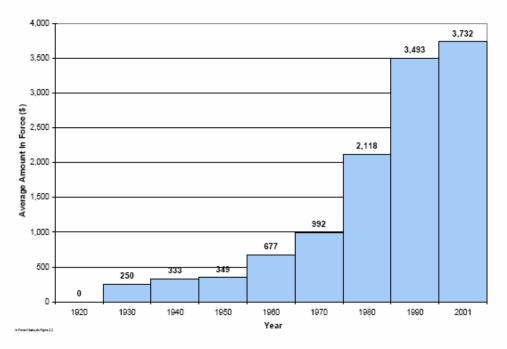


Figure 2.2 - Average Amount In Force per Policy or Certificate (1920-2001)

As the cost of consumer products has risen, creditors have extended the term of credit. In 1955, 65% of all consumer credit was for one year or less. Gradually, 24-month and then 36-month terms became standard. New motor loans moved to 48-month terms in the late 1970s then continued to 60 months (or more) by the late 1980s.

6) Growth of Credit Disability Insurance

Initially, credit disability insurance policies paid off the loan if the insured was totally and permanently disabled. By 1950, a product providing a monthly benefit equal to the loan's monthly payment during the insured's continued disablement replaced the original concept.

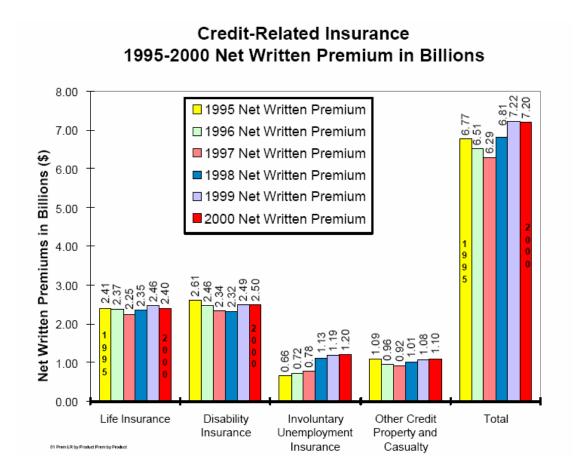
Growth was slow. Initially, disability cover was provided under individual policies. By 1956, the total credit disability premiums were just \$32 million. Over time, credit disability insurance gained popularity and rapid growth has occurred in the last 30 years. The product is now offered in almost every situation that credit life insurance is sold.

7) Growth of Credit Involuntary Unemployment Insurance

Unemployment has always been considered as a difficult risk to cover. However, as insurers looked for ways to boost their income from credit insurance business, they began to cover the risk of involuntary unemployment. The benefit to the insured is that their

credit payments are made for a specified period of time in the event of involuntary loss of employment.

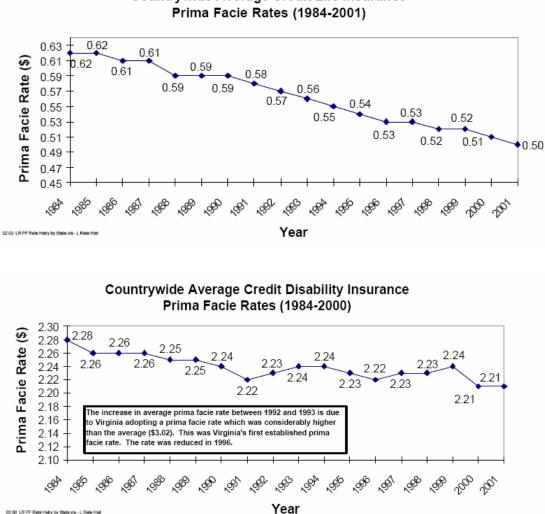
Growth was slow until the mid-1980s. Since then, a package of life, disability, and involuntary unemployment insurance (IUI) has been offered to cardholders.



Written Premiums (or Net Written Premiums): The total gross written premiums less the premium refunds paid on terminated policies.

8) Downward Trend in Prima Facie Rates

The countrywide weighted average credit life prima facie rate has been declining steadily since 1984, dropping from 62 cents in 1984 to 50 cents in 2001—a drop of 20%. In 1950, the prevailing rate was \$1.00. By contrast, the countrywide weighted average credit disability prima facie rate has dropped from \$2.28 in 1984 to \$2.21 in 2001—a drop of only 3.1 percent.



Countrywide Average Credit Life Insurance

9) Split of credit life premiums

(Source: www.cciaonline.com)

02.00 LB PE Rate Hatry ha

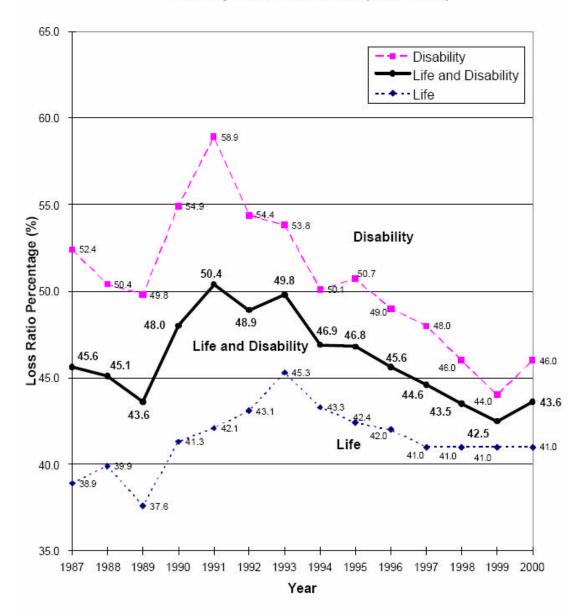
The average amount of new credit life coverage is about \$6,000. The national average rate across the nation for credit life insurance is 50 cents per \$100 per year of coverage. That means a consumer pays \$30 a year to insure a \$6,000 loan - 8.2 cents a day.

This is how the credit insurance industry spends those 8.2 cents a day:

- 3.5 cents for insurance claim benefits
- 2.7 cents to lenders who serve consumers and companies as sales representatives
- 0.3 cents in taxes and fees
- 0.4 cents in salaries and benefits to our employees
- 0.9 cents for other administrative costs
- 0.4 cents as profit

10) Loss Ratios

Both the credit life and the credit disability countrywide loss ratios have fluctuated from 1987 through 2000, but the range of fluctuations has been narrow in the last six years. Since 70% of the new business is still single premium coverage, the effect of 1996-2000 rate reductions is just beginning to appear. Considering the impact of further rate reductions in 2001 and 2002, the upward trend is likely to continue for many years.



Countrywide Loss Ratios (1987-2000)

11) SOA: Credit Life experience analysis

It is interesting to go through the experience analysis of Credit Life business done by Society of Actuaries for the period 1998-99.

29 companies contributed data to the study. Single premium policies only are included as only they are reserved on mortality basis. The differences in mortality by gender, underwriting status or type of lender were not studied as the split of data was not available.

Mortality rates were computed by both amount and number. The actual to expected ratio is shown below. The expected mortality rates are calculated using 100% of the new 200X CSO Male Composite Ultimate Table mortality rates.

By Amount				Expected	Expected	Actual to
Age	Grouped Exposures	Grouped Claims	Mortality Rate	Mortality Rate	Claims	Expected
22	9,298,325,546	8,679,622	0.933	0.98	9,075,267	95.64%
27	12,140,464,609	8,590,969	0.708	1.14	13,869,316	61.94%
32	13,698,973,550	11,993,194	0.875	1.15	15,788,126	75.96%
37	16,863,356,112	18,735,445	1.111	1.40	23,689,304	79.09%
42	19,912,780,285	35,453,989	1.780	2.09	41,575,038	85.28%
47	20,244,601,986	51,416,668	2.540	3.22	65,310,940	78.73%
52	18,230,572,297	72,361,215	3.969	4.78	87,351,612	82.84%
57	14,771,537,170	91,693,109	6.207	7.96	117,887,105	77.78%
62	10,456,908,824	104,136,763	9.959	13.10	137,625,565	75.67%
67	3,820,622,692	51,536,277	13.489	21.06	81,012,684	63.62%
72	319,939,790	4,662,188	14.572	<u>33.17</u>	10,691,014	43.61%
Total	139,758,082,861	459,259,438	3.286	4.321	603,875,972	76.05%

Table 1 by Amount

By Number				Expected	Expected	Actual to
Age	Grouped Exposures	Grouped Claims	Mortality Rate	Mortality Rate	Claims	Expected
22	1,653,980	1,649	0.997	0.976	1,614	102.13%
27	2,021,469	1,557	0.770	1.142	2,309	67.41%
32	2,115,176	2,043	0.966	1.152	2,438	83.80%
37	2,411,558	2,953	1.225	1.404	3,388	87.18%
42	2,631,072	4,670	1.775	2.086	5,493	85.01%
47	2,511,983	6,836	2.722	3.222	8,105	84.35%
52	2,117,072	8,930	4.218	4.782	10,145	88.02%
57	1,660,903	11,334	6.824	7.956	13,259	85.48%
62	1,245,886	13,563	10.886	13.096	16,405	82.68%
67	560,708	7,389	13.178	21.062	11,887	62.16%
72	56,965	704	12.365	33.170	<u>1,901</u>	37.05%
Total	18,986,773	61,629	3.246	4.053	76,945	80.09%

Table 2 by Number

The overall actual to expected mortality ratio based on number is higher than the mortality ratio based on amount. One might expect anti-selection by size but this is not apparent in the above tables. A possible explanation for this is that many states cap the amount of insurance that can be written as credit life insurance thus reducing anti-selection by size.

12. Case Study - Canadian Model

1) Creditor business in Canada

The Canadian banks have developed an efficient creditor life model. They have built an effective sales process that allows the loan officer to easily sell the insurance at the same time as the loan.

2) Bank Distribution

Banking in Canada is dominated by 5 banks. For regulatory reasons, banks can only sell credit insurance products through the branch. The mortgage and loan creditor products are most often sold by the loan officer or customer service representatives (CSRs). In the past training was only done on core bank products which were considered to be loans, investments and banking accounts. Credit insurance is now considered a core product and training and individual sales targets are set.

Banks cannot tie the acceptance of the loan to the purchase of the insurance. The loan officer makes the insurance offer at the point of sale of the loan Some banks achieve penetration rates in the mid-70%'s on credit life for mortgages. There is a high percentage of 'Joint Life' and 'First to die' products.

3) **Products**

The following benefits are sold:

- 🗷 Life Cover
- ∠ Disability Insurance
- Critical Illness
- & Accidental Death & Dismemberment

4) Underwriting

The risk of anti-selection is perceived to be low as the customer is there to buy the mortgage not the insurance. Insurers allow 4 tables (200%) above standard mortality to qualify as standard. This would need to be allowed for in the pricing.

There is a questionnaire with 4 to 5 questions for amounts less than US\$150,000. The approval is automatic if "No" answers are made to all medical questions.

5) Financial Model

Generally the creditor insurance market is price inelastic so price does not have to compete with the standalone term. The Loss ratios are around 50% or lower. Profit Margins are close to 40%. Mortality tends to track normal standard mortality for term blocks.

13. Conclusion

Credit life has huge potential and can be as big as regular life insurance. However, it needs to be approached differently. Over a period of time, it needs to be developed as a separate line of business in terms of pricing and reserving.

As the distribution is predominantly through credit institutions, insurers should work closely with them to develop a workable distribution model.

Finally, it has a social cause in it that the deceased's family will be spared the burden of debt. Hence the government, regulator and industry should work together in increasing the penetration of this product.

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