Level of Awareness Regarding Bancassurance and Choice of Insurance Product among Bank Customers in India

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Abstract

The study endeavors to analyze the effect of awareness level regarding bancassurance among the bank customers on choice of Insurance product in India. A primary survey of 552 bank customers, who have purchased bancassurance, reveals the following facts using ordered response Probit analysis: i) regardless of the present efforts of the banks, the expected level of awareness among the customers of banks regarding bancassurance is either partial or significant; ii) the expected probability of complete awareness is very low; iii) the banking sector needs to improve upon the level of awareness regarding bancassurance among their customers and the factors like frequency of dealing with bank customers, bank brochures and other publications may prove to be helpful; and iv) the reasons because of which, three sources of information namely, Newspapers, Bank Staff and Direct Mail are failing to spread complete information regarding bancassurance among customers of the banks are needed to be analyzed. However, an execution of structural equations model rejects the hypothesis of insignificant effect of level of awareness on choice of insurance product in weak form.

Keywords: Banks, Insurance, Ordered Response Probit Model, Structural Equations Modeling

JEL Code Classification: G21, G22, C25, C35

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1. Introduction

Gone are the days, when banks used to earn interest income from the difference between lending and borrowing rates charged to customers. Current market conditions however, have put a strain on the interest income as cost of borrowing funds have increased substantially and lending has become too competitive to provide worthwhile interest income (Kumar, 2007). Due to which, over the last three decades, there has been a phenomenal increase in the size, spread and activities undertaken by banks in India (Rawani and Gupta, 2002). Most of the Indian banks have set up their subsidiaries through which they are providing a wide range of specialized financial services like underwriting of equities and bonds, venture capital financing, leasing, insurance etc. It has resulted in to transformation from domestic banking to international banking. These changes were required because a growing economy not only demands stronger and vibrant financial sector but also necessitates to provide with more sophisticated and variety of financial and banking products and services (Karunagaran, 2007). Banks, in particular, stride into several new areas and offer innovative products, viz., merchant banking, lease and term finance, capital market/equity market related activities, hire purchase, real estate finance and so on. Thus, present-day banks have become far more diversified than ever before. Therefore, their entrance into insurance business is only a natural corollary and is fully justified too, as 'insurance' is another financial service required and desired by the bank's customers (Karunagaran, 2007). Moreover, bancassurance income can be used to partly offset the interest reduction in a competitive lending environment. Thus, selling the bancassurance widens the scope of commercial banking and helps to diversify the market risk.

However, the bancassurance can significantly improve the financial performance of banks if the customers are significantly aware about the bancassurance characteristics. In an absence of significant awareness regarding bancassurance among customers of the banks, the objective of introducing bancassurance will be completely defeated. Thus, the analysis of the level of awareness and factors affecting that level assume importance. The analysis will not only help to know the extent of awareness but will also help to draft significant policy implications to improve the extent of awareness regarding bancassurance among the customers of bank.

To the best of our knowledge, handful of studies is available on analyzing the level of awareness regarding bancassurance among bank customers. Amongst, the prominent studies by Lymberopoulos et al. (2004), Rajkumari (2007), Popli and Rao (2009) are important attempts to in the same direction. It won't be erroneous to conclude that the study by Popli and Rao (2009) is the Indian version of Lymberopoulos et al. (2004). While the later used data of 720 customers of Greek banks, the earlier study utilized the data of 115 respondents from Indian Capital New Delhi. Both of these studies utilized the same methodology based upon factor analysis and Chi-square test and derive the policy implications in same line. In the

lines of Lymberopoulos et al. (2004), Popli and Rao (2009) also used factor analysis on a sample of 115 respondents and tried to find out (i) the awareness and willingness on their part to purchase insurance products from banks (ii) investigate the factors influencing customer's attitude towards banks and insurance companies and (iii) reasons to buy insurance products from the banks. All these studies observed the low level of awareness and emphasized the importance of customer relationship management and finally concluded by suggesting that banks should try to exploit the existing opportunities to cross sell insurance products through their branch network, by designing a clear and effective marketing strategy aimed at increasing awareness and customer's willingness to choose banks as insurance providers. However, Rajkumari (2007) in her study on customer preference towards insurance services and bancassurance took a sample of 100 respondents from Centurian Bank of Chennai and used descriptive statistics along with Chi-square test to check awareness and preference level of the respondents. The results revealed that i) 64 percent of respondents were aware about Centurian bank's tie up with insurance companies. Tele callers on the part of banks was the main source of awareness; ii) health insurance by ICICI was the most preferred in non life insurance policies; iii) Chi-square test suggested low correlation of Bancassurance clients with Centurian's bank accounts. In sum, the study concluded that level of awareness about Bancassurance should be worked upon to improve insurance penetration level.

The review of aforementioned studies depict that all of the above studies used factor analysis to analyze the factors affecting extent of awareness. The present study is though in same direction but differs in the context of methodology used and sample coverage. The study uses a sample of 552 bank customers of 20 Indian commercial banks. The sample has been collected from three cities of Indian Punjab namely, Amritsar, Jalandhar and Ludhiana. Instead of using the indigenous factor analysis, ordered Probit regression analysis has been utilized to spot the factors influencing extent of awareness among the bank customers regarding bancassurance. The analysis has been divided into four sections. Including the present introductory one, Section-2 provides database and methodology used for testing the set hypotheses. The basics of ordered probit model have been discussed in the same section. The third section offers empirical exposition on extent of awareness, factors affecting extent of awareness regarding bancassurance and effect of awareness level on choice of insurance products. The last section concludes the study and offers some relevant policy implications.

2. Database and Methodology

The present analysis is based on the primary survey of the 552 bank customers, who have bought bancassurance. The analysis covers 20 commercial banks i.e., 10 banks from each public and private category. These banks either operate in joint venture with some Insurance provider or offer agency services to them. For analysis purpose, 18 independent variables have been used for regression analysis with extent of

awareness as polychotomous dependent variable. The dependent variable is categorized into four categories, defined as follows:

$$y_i = \begin{cases} 0; & \textit{If not aware about Bancassurance} \\ 1; & \textit{If partially aware about Bancassurance} \\ 2; & \textit{If significantly aware about Bancassurance} \\ 3; & \textit{If completely aware about Bancassurance} \end{cases}$$

Given that the dependent variable represents the level of awareness using four point preferences scaling (see Annexure-1 for questioner), the simple categorical dependent variable model is not applicable. Thus, the use of the ordered response/choice dependent variable is suggested by the researchers. Let X be the vector consisting of all explanatory variables affecting the extent of awareness regarding bancassurance among bank customers and β be the vector of all slope parameters to be estimated. Then, the likelihood function may be written as:

$$L\left(\beta,\mu_0,\mu_1,\mu_2\right) = P(y_0 = 0) \times P(y_1 = 1) \times P(y_2 = 2) \times P(y_3 = 3) \tag{1}$$

$$Where,$$

$$\begin{aligned} P(y_0 = 0) = P\left(y_i^* \le \mu_0\right) &= P\left(\beta'x + \varepsilon_i \le \mu_0\right) \\ &= P\left(\varepsilon_i \le \mu_0 - \beta'x\right) \\ &= \Phi\left(\mu_0 - \beta'x\right) \end{aligned}$$

$$\begin{aligned} P(y_1 = 1) = P\left(\mu_0 \le y_i^* \le \mu_1\right) &= P\left(\mu_0 \le \beta'x + \varepsilon_i \le \mu_1\right) \\ &= P\left(\mu_0 - \beta'x \le \varepsilon_i \le \mu_1 - \beta'x\right) \\ &= \Phi\left(\mu_1 - \beta'x\right) - \Phi\left(\mu_0 - \beta'x\right) \end{aligned}$$

$$\begin{aligned} P(y_1 = 2) = P\left(\mu_1 \le y_i^* \le \mu_2\right) &= P\left(\mu_1 \le \beta'x + \varepsilon_i \le \mu_2\right) \\ &= P\left(\mu_1 - \beta'x \le \varepsilon_i \le \mu_2 - \beta'x\right) \\ &= \Phi\left(\mu_2 - \beta'x\right) - \Phi\left(\mu_1 - \beta'x\right) \end{aligned}$$

$$and$$

$$\begin{aligned} P(y_1 = 3) = P\left(y_i^* \ge \mu_2\right) &= P\left(\beta'x + \varepsilon_i \ge \mu_2\right) \\ &= P\left(\varepsilon_i \ge \mu_2 - \beta'x\right) \\ &= 1 - \Phi\left(\mu_2 - \beta'x\right) \end{aligned}$$

Thus, the likelihood function may be written as:

$$\begin{aligned} L\left(\beta,\mu_0,\mu_1,\mu_2\right) = \Phi\left(\mu_0 - \beta'x\right) &\times \left[\Phi\left(\mu_1 - \beta'x\right) - \Phi\left(\mu_0 - \beta'x\right)\right] \\ &\times \left[\Phi\left(\mu_2 - \beta'x\right) - \Phi\left(\mu_1 - \beta'x\right)\right] \times \left[1 - \Phi\left(\mu_2 - \beta'x\right)\right] \end{aligned} \tag{2}$$

Where, $\Phi\left(\cdot\right)$ represents cumulative distribution function (CDF) defined as follows:

$$\Phi\left(\mu_0 - \beta'x\right) = \int_{-\infty}^{\mu_0 - \beta'x} \frac{1}{\sqrt{2\pi}} e^{-\frac{1}{2}[\mu_0 - \beta'x]^2} d\left(\mu_0 - \beta'x\right); \; \mathrm{Pr}obit \; Estimation$$

$$and, \; \Phi\left(\mu_0 - \beta'x\right) = \int_{-\infty}^{\mu_0 - \beta'x} \frac{e^{-(\mu_0 - \beta'x)}}{\left(1 + e^{-(\mu_0 - \beta'x)}\right)^2} d\left(\mu_0 - \beta'x\right); \; \mathrm{Logit} \; Estimation$$

Maximizing (2) with respect to β, μ_0, μ_1 and μ_2, the estimates of these parameters can be obtained. The point estimates of β are slope estimates whereas, μ_0, μ_1 and μ_2 are unknown threshold parameters representing threshold limits of y_i^*. When faced with a ranking problem, we develop a "sentiment" about how we feel concerning the alternative choices and the higher the sentiment, the more likely a higher-ranked alternative will be chosen (Hill et al., 2011). For example, in our case, higher the extent of awareness, the more likely a higher value alternative will be chosen. These sentiments (or extent of awareness) are unobservable and when they enter decisions are called latent variables denoted by y_i^*.

In categorical response models, simple point estimates of β cannot be used for interpretation purpose. The use of marginal effects is generally preferred which may be obtained as:

$$\left.\begin{aligned}
\frac{\partial P(y=0)}{\partial X_k} &= -\phi(\mu_0 - \beta'X) \times \beta_k \\
\frac{\partial P(y=1)}{\partial X_k} &= [\phi(\mu_0 - \beta'X) - \phi(\mu_1 - \beta'X)] \times \beta_k \\
\frac{\partial P(y=2)}{\partial X_k} &= [\phi(\mu_1 - \beta'X) - \phi(\mu_2 - \beta'X)] \times \beta_k \\
\frac{\partial P(y=3)}{\partial X_k} &= \phi(\mu_3 - \beta'X) \times \beta_k
\end{aligned}\right\} \qquad (3)$$

In these expressions $\phi(.)$ denotes the probability density function of a standard normal variate, and its values are always positive. These marginal effects represent change in the probability of being completely aware about bancassurance because of a unit change in independent variable. The direction of effect depends upon the sign of β_k; a positive value represent positive whereas, a negative value signifies adverse impact.

To check the impact of extent of awareness on the choice of the product category (i.e., standalone and tied up products), a structural equations model (SEM) given in Figure-1 has been estimated using the method of Full Information Likelihood (FIML). The standalone product involves marketing of the insurance products through referral or corporate agency without mixing the insurance products with the

products/services of the banks. Insurance is sold as one more item in the menu of the products offered to the bank's customers, however retaining their respective brands of their own. However, tied-up (complementary) products are those which are tied-up with the normal banking operations e.g., many banks in India, in recent years, has been aggressively marketing credit and debit card where the cardholders get the 'insurance cover' for a nominal fee or (implicitly included in the annual fee) free from explicit charges/ premium. Similarly, the home loans/vehicle loans etc have also been packaged with the insurance cover as an additional incentive.

For analysis purpose, the extent of awareness is being hypothesized to affect the customer's choice of product category. It has been hypothesized that a person with less awareness will go generally for tied-up products. However, a customer having high level of awareness will purchase standalone product from the banks. Thus, the extent of awareness must affect the choice of standalone product positively and vice-versa.
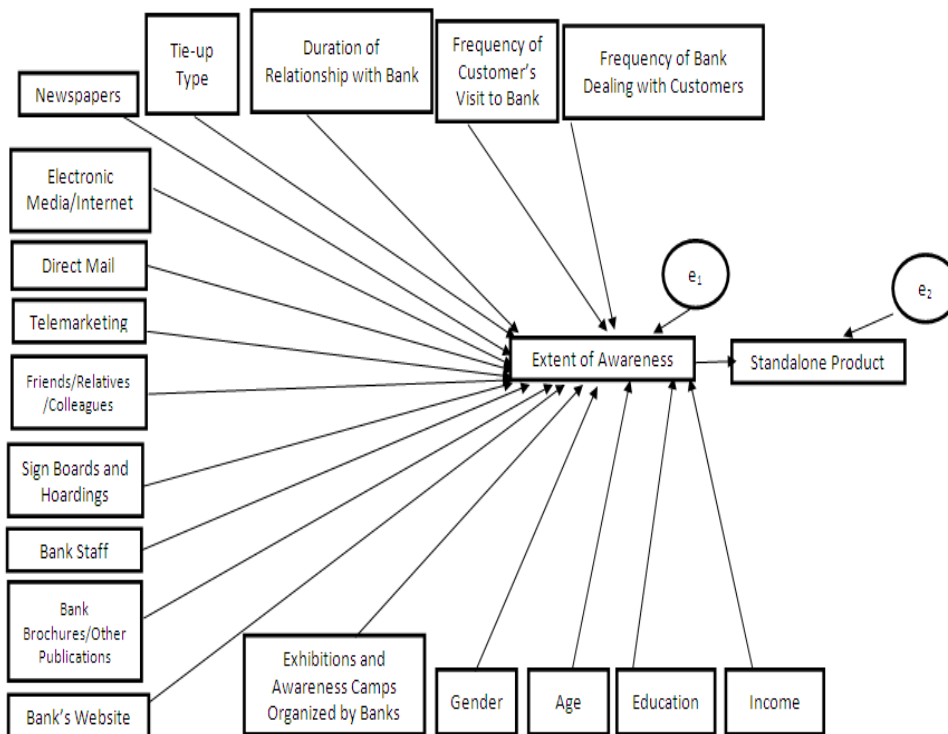

Figure 1: Structural Equations Model (SEM) for Evaluation of Factors Affecting Extent of Awareness Regarding Bancassurance among Bank Customers

Source: Author's Elaborations

In Figure-1, the variables in squares are determined variables amongst which Bancaawareness and Standalone-Product are dependent variables and rests are the independent variables. Amongst sources of information in the figure, a unit value is assigned if the respondent has ticked a source otherwise the variable is assigned a zero value. The lower portion of the diagram includes demographic variable namely, Gender, Education, Age and Income. However, the upper portion includes bank level variables namely, i) frequency of dealing representing the number of times the bank employee deals with customers particularly for selling insurance; ii) tie-up type representing tie-up arrangements of the bank with the insurer. The variable is dichotomous in nature and assumes a value one for Joint Venture and two for Agency form of relationship; iii) Frequency representing the frequency of a customer visiting the bank premises; and iv) Duration representing the length of relationship of customer with bank. All of these variables except Standalone Product have also been used for the estimation of aforementioned ordered response Probit model.

3. Empirical Analysis

The present section deals with the interpretation of the results obtained through the execution of ordered Probit model. The elucidation includes i) analysis of extent of awareness regarding bancassurance among the bank customers of Punjab; and ii) explanation of factors affecting extent of awareness regarding bancassurance among bank customers. A detailed analysis of marginal affects obtained for each category of awareness has been performed that helps to identify the relevance of each policy instrument in spreading awareness at its different levels.

3.1 Extent of Awareness Regarding Bancassurance

Table 1 comprises the probabilities of falling the respondent in each category of dependent variable. The results have been obtained using the post estimation .mfx, predict (p outcome(0)) command in STATA-11. The command is used after executing the ordered Probit model and marginal effects have been computed for each category of outcome (i.e, 0,1, 2 and 3). The results obtained substantiates that each bank customer, purchasing the bancassurance, has the highest probability of being partially aware. The observed probability of partial awareness is highest to the tune of 0.454 followed by the probability of significant awareness to the amount of 0.233. The magnitudes of being either completely aware or unaware are 0.162 and 0.151, respectively. Thus, the person whosoever purchases bancassurance in Punjab is likely to be either partially or significantly aware about the bancassurance.

Table 1: Probability Distribution of the Categories of Extent of Awareness

Category	Particulars	STATA-11 Command	Probability
P(Y=0)	No Awareness	.mfx, predict(p outcome(0))	0.151
P(Y=1)	Partial Awareness	.mfx, predict(p outcome(1))	0.454
P(Y=2)	Significant Awareness	.mfx, predict(p outcome(2))	0.233
P(Y=3)	Complete Awareness	.mfx, predict(p outcome(3))	0.162

Source: Authors' Calculations

Table 2 represents the cut-off points obtained for defining the numerical value of dependent variable. In model (2), μ_0, μ_1 and μ_2 are unknown threshold parameters representing threshold limits of y_i^*. When faced with a ranking problem, we develop a "sentiment" about how we feel concerning the alternative choices and the higher the sentiment, the more likely a higher-ranked alternative will be chosen.

Table 2: Threshold values of Latent Variable of Extent of Awareness

Cut-off Points (See Model 2)	Coefficient	Std. Error	95% Confidence Interval`	
			Lower	Upper
μ_0	(-) 0.273	0.277	(-) 0.816	0.270
μ_1	1.027	0.279	0.479	1.574
μ_2	1.746	0.285	1.189	2.304

Source: Authors' Calculations

For example, in our case, higher the extent of awareness, the more likely a higher value alternative will be chosen. The visualization of Table-2 confirms that μ_0 is very low in the comparison of actual value of dependent variable and thus, it is lesser likely that the customer will have no awareness regarding bancassurance.
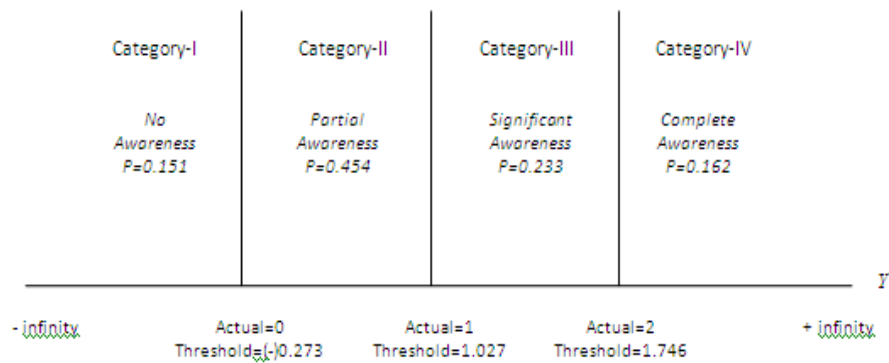

Figure 2: Mapping the Results of Ordered Probit Analysis of Extent of Awareness
Source: Author's Elaborations

The scenario can be explained using the Figure 2. The horizontal axis represents the latent variable and the comparison of actual and threshold values have been performed. Given that the threshold value for no awareness is low enough in comparison to actual value zero, the probability of being unaware is less enough. However, the difference between actual and threshold value is least (i.e., 1-1.027=(-) 0.027) for the category of being partially aware and hence it is most likely that the customers purchasing bancassurance will be partially aware with the highest probability 0.454. The difference between actual and threshold value is though less (i.e., 2 - 1.746 = 0.254) for the Category-III of significant awareness but observed to

be higher than the Category-II. Thus, the classification has second highest probability to the tune of 0.233.In sum, the combined probability of having some information (i.e., partial and significant) about bancassurance is 0.687 among the bank customers of Punjab.

3.2 Factors Affecting Extent of Awareness Regarding Bancassurance

Table 3 put forward the point estimates of the parameters of Probit model. As mentioned earlier, the ordinary estimates of slope parameters help only to decide the direction of relationship among independent and dependent variables.

Table 3: Point Estimates of the Parameters of Ordered Probit Model

Independent Variables	Coefficient	Standard Error	Z-Statistics	P>|z|	95% Confidence Interval	
Bank Level Factors						
Tie-up Type	(-)0.011	0.095	-0.110	0.909	-0.198	0.176
Duration of Relationship with Bank	0.098**	0.049	2.030	0.043	0.003	0.194
Frequency of Customer's Visit to Bank	0.021	0.035	0.590	0.557	-0.048	0.089
Frequency of Bank Dealing with Customer	0.079*	0.042	1.870	0.062	-0.004	0.162
Sources of Information to Customers						
Newspaper	(-)0.185**	0.099	-1.880	0.041	-0.379	0.008
Electronic Media/Internet	0.067	0.071	0.940	0.347	-0.073	0.206
Direct Mail	(-)0.220**	0.111	-1.970	0.049	-0.438	-0.001
Telemarketing	0.003	0.120	0.030	0.978	-0.232	0.239
Friends/Relatives/Colleagues	0.106	0.099	1.060	0.288	-0.089	0.300
Sign Boards and Hoardings	(-)0.049	0.098	-0.500	0.619	-0.242	0.144
Bank Staff	(-)0.188**	0.107	-1.750	0.049	-0.398	0.022
Bank Brochures /Other Publications	0.200**	0.102	1.960	0.050	0.000	0.401
Bank's Website	0.036	0.102	0.360	0.721	-0.163	0.235
Exhibitions and Awareness Camps Organized by Banks	0.169	0.157	1.080	0.280	-0.138	0.476
Demographic Factors						
Gender	0.021	0.095	0.220	0.823	-0.164	0.207
Customer's Age	0.073	0.057	1.280	0.200	-0.038	0.183
Education	(-)0.004	0.062	-0.070	0.947	-0.125	0.117
Income	0.107*	0.058	1.860	0.063	-0.006	0.220

Notes: ***, ** and * represent that the coefficient is statistically significant at 1, 5 and 10 percent levels of significance, respectively. **Source:** Author's Calculations.

The analysis of Table 3 support the inferences that i) the duration of customer's relationship with the bank positively and significantly affect the extent of awareness regarding bancassurance; ii) the frequent dealing of the bank employees with customers regarding the bancassurance significantly enhances the level of awareness regarding bancassurance; iii) among sources of information, Bank Brochures and Other Publications contribute significantly in spreading information regarding

bancassurance; iv) three sources of information namely, Staff of the Bank, Newspaper, and Direct Mail to Customers are negatively affecting the extent of awareness regarding bancassurance among bank customers; and v) among demographic factors, income of the consumer significantly contribute in enhancing the extent of awareness regarding bancassurance among the bank customers.

However, to stare the impact elasticity of aforementioned factors and to defend the negative impact of three sources of information namely, (i.e. Bank Staff, Newspaper and Direct mail) against a-priori information, the analysis of marginal effects is necessary (see model (3) for details on marginal effects). Table 4 provides the marginal effects computed for each category of the dependent variable.

Table 4: Marginal Effects of Factors Affecting the Extent of Awareness Regarding Bancassurance among Bank Customers

Dependent Variable / Independent Variables	Probability of No Awareness P(Y=0)	Probability of Partial Awareness P(Y=1)	Probability of Significant Awareness P(Y=2)	Probability of Complete Awareness P(Y=3)
Bank Level Factors				
Tie-up Type	0.003(0.909)	0.002(0.909)	-0.002(0.909)	-0.003(0.909)
Duration of Relationship with Bank	-0.023**(0.044)	-0.015**(0.050)	0.014**(0.048)	0.024**(0.043)
Frequency of Customer's Visit to Bank	-0.005(0.557)	-0.003(0.558)	0.003(0.558)	0.005(0.557)
Frequency of Bank Dealing with Customer	-0.018*(0.063)	-0.012*(0.070)	0.011*(0.068)	0.019*(0.062)
Sources of Information to Customers				
Newspaper	0.044*(0.066)	0.027**(0.048)	-0.026*(0.068)	-0.045*(0.058)
Electronic Media/Internet	-0.016(0.348)	-0.010(0.351)	0.009(0.350)	0.016(0.348)
Direct Mail	0.054*(0.063)	0.029**(0.026)	-0.032*(0.062)	-0.051*(0.057)
Telemarketing	-0.001(0.978)	-0.001(0.978)	0.000(0.978)	0.001(0.978)
Friends/Relatives/Colleagues	-0.024(0.282)	-0.016(0.306)	0.015(0.283)	0.026(0.295)
Sign Boards and Hoardings	0.011(0.620)	0.007(0.616)	-0.007(0.621)	-0.012(0.617)
Bank Staff	0.042*(0.070)	0.030**(0.044)	-0.025*(0.072)	-0.048*(0.090)
Bank Brochures /Other Publications	-0.047**(0.050)	-0.030*(0.057)	0.028*(0.053)	0.049**(0.050)
Bank's Website	-0.008(0.720)	-0.006(0.724)	0.005(0.720)	0.009(0.722)
Exhibitions and Awareness Camps Organized by Banks	-0.037(0.247)	-0.029(0.336)	0.022(0.242)	0.044(0.309)
Demographic Factors				
Gender	-0.005(0.823)	-0.003(0.823)	0.003(0.823)	0.005(0.823)
Customer's Age	-0.017(0.200)	-0.011(0.207)	0.010(0.205)	0.018(0.200)
Education	0.001(0.947)	0.001(0.947)	-0.001(0.947)	-0.001(0.947)
Income	-0.025*(0.064)	-0.016*(0.072)	0.015*(0.069)	0.026*(0.064)

Notes: i) ***, ** and * represent that the coefficient is statistically significant at 1, 5 and 10 percent levels of significance, respectively; and ii) Values in parenthesis of type ( ) are *p*-values.
Source: Author's Calculations.

The coefficients are the elasticity that explains the percentage change in the probability of the category of extent of awareness under evaluation due to one percent change in the independent variable.

With an objective to identify the factors enhancing extent of awareness regarding bancassurance, the marginal effects on fourth category of complete awareness (i.e., P(Y=3)) may be discussed before other categories. The analysis of Table 4 confirms that the duration of relationship with bank and Bank Brochures/Other Publications are the significant sources of spreading complete information regarding bancassurance among the customers of banks. Frequency of dealing and income of customers are though positively affecting the probability of complete awareness but they are comparatively less significant factors in the dispersal of awareness regarding bancassurance.

The sources of information bearing negative coefficient in Table 3, observed to be having a positive marginal effects for categories of no awareness (i.e., P(Y=0)) and partial awareness (i.e., P(Y=1)). In between these three categories, the marginal effects of the said three sources of information are comparatively more significant for later category than that observed for earlier category. Hence, it may be concluded that Newspaper, Direct Mail and Bank Staff are helpful in diffusing partial awareness among bank customers. Thus, a bank involved in insurance selling must stress upon publishing and distributing information brochures regarding insurance policies to enhance the extent of information regarding bancassurance among the bank customers.

3.2 Awareness and Choice of Product

The income from insurance is important component of non-interest income and with an objective to improve the financial viability of commercial banks, an improvement in the insurance premium is must. For enhancing the income from bancassurance, banks will have to attract the customers for choosing appropriate insurance product. Through bancassurance, the commercial banks sale two categories of insurance products; tied-up and standalone. The purchase of tied-up product generally represents forced selling whereas, the purchase of standalone products represents customer's faith in bancassurance and thus, signify customers' willingness to purchase the insurance product from the bank.

It is hypothesized on a priori information that level of awareness regarding bancassurance will motivate the customers to choose standalone products. Thus, a structural equations model (SEM) given in Figure-2.1 with the dependent variable standalone has been estimated using the method of FIML. Table 5 provides the point estimates of structural model defined in Figure 2.1. The first dependent variable standalone is dichotomous and second bancaawareness is polychotomous in nature. Through FIML, the model estimation will automatically converge into Probit estimation with standard normal variate. Thus, the point estimates of equation with bancaawareness as dependent variable in SEM are approximately equal to those

obtained from ordered probit model up to at most one decimal point (Compare Table 3 and 5).

Table 5: Awareness Regarding Bancassurance and Choice of Product Category

Independent Variables	Coefficient	Standard Error	Z-Statistics	P>|z|	95% Confidence Interval	
Equation 1: Dependent variable *Bancawareness*						
Bank Level Factors						
Tie-up Type	-0.012	0.082	-0.16	0.876	-0.172	0.147
Duration of Relationship with Bank	0.086	0.041	2.08	0.038	0.004	0.167
Frequency of Customer's Visit to Bank	0.021	0.030	0.72	0.471	-0.037	0.080
Frequency of Bank Dealing with Customer	0.076	0.036	2.10	0.035	0.005	0.146
Sources of Information to Customers						
Newspaper	-0.0153	0.084	-1.81	0.070	-0.318	0.012
Electronic Media/Internet	0.051	0.061	0.84	0.399	-0.068	0.170
Direct Mail	-0.164	0.094	-1.75	0.080	-0.349	0.019
Telemarketing	0.022	0.102	0.21	0.832	-0.179	0.222
Friends/Relatives/Colleagues	0.073	0.085	0.86	0.391	-0.094	0.239
Sign Boards and Hoardings	-0.042	0.084	-0.50	0.620	-0.206	0.123
Bank Staff	-0.154	0.091	-1.68	0.093	-0.332	0.205
Bank Brochures /Other Publications	0.165	0.087	1.90	0.058	-0.005	0.336
Bank's Website	0.029	0.087	0.34	0.730	-0.139	0.199
Exhibitions and Awareness Camps Organized by Banks	0.167	0.132	1.26	0.207	-0.092	0.426
Demographic Factors						
Gender	0.025	0.081	0.31	0.755	-0.133	0.183
Customer's Age	0.73	0.048	1.51	0.132	-0.021	0.167
Education	-0.011	0.053	-0.21	0.831	-0.114	0.092
Income	0.093	0.049	1.90	0.058	-0.003	0.189
Constant	0.714	0.236	3.03	0.002	0.252	1.177
Equation 2: Dependent variable *Standalone*						
Bancaawareness	0.041*	0.022	1.850	0.064	-0.002	0.085
Constant	0.499	0.038	13.23	0.000	0.425	0.573

Notes: ***, ** and * represent that the coefficient is statistically significant at 1, 5 and 10 percent levels of significance, respectively. **Source**: Author's Calculations.

The visualization of Table 5 reveals that the bancaawareness is though significantly affecting choice of insurance product but the observed effect is not strong enough. It is worth mentioning here that the observed coefficient to the tune of 0.041 is statistically significant at 10 percent level of significance with a p-value of 0.064. Moreover, the observed coefficient is identically equal to the marginal effect of single equation Probit estimation with standalone as dependent variable and

bancaawareness as independent variable with same Z-statistics and p-value. Thus, the hypothesis of insignificant effect of bancaawareness on choice of product has been rejected in weak form.

4. Summary, Conclusions and Policy Implications

The study carries objective to analyze the extent of awareness regarding the bancassurance among the customers of the bank. The data of 552 customers of 20 public and private sector banks have been utilized to identify the factors affecting extent of awareness among the target sample. Given that the dependent variable level of awareness is polychotomous ordered response variable, the use of ordered Probit model has been preferred over the Classical linear regression model. The execution of the model confirms that the i) the probability of being partially aware is highest followed by significant awareness; ii) probability of being completely aware about bancassurance is about 16 percent; iii) the duration of customer's relationship with the bank positively and significantly affect the extent of awareness regarding bancassurance; iv) the frequent dealing of the bank employees with customers regarding the bancassurance significantly enhances the level of awareness regarding bancassurance; v) among sources of information, Bank Brochures and Other Publications contribute significantly in spreading information regarding bancassurance; vi) three sources of information namely, Staff of the Bank, Newspaper, and Direct Mail to Customers are negatively affecting the probability of complete awareness whereas, found to be positively affecting partial awareness; vii) among demographic factors, income of the consumer significantly contribute in enhancing the extent of awareness regarding bancassurance among the bank customers; and viii) Thus, the hypothesis of insignificant effect of bancaawareness on choice of product has been rejected in weak form.

Thus, the analysis revels that banking sector needs to improve upon the level of awareness regarding bancassurance among their customers. Regardless of the present efforts of the banks, the level of awareness among the customers of banks regarding bancassurance is either partial or significant. Hence, a big distance has to be covered for enhancing the awareness up to complete levels. In this drive, the frequency of dealing with bank customers, bank brochures and other publications may prove to be helpful. The reasons because of which, three sources of information namely, Newspapers, Bank Staff and Direct Mail are failing to spread complete information regarding bancassurance among customers of the banks are needed to be analyzed. Given these policy implications in policy outlook, the banks may spread the desired level of information among the customers regarding bancassurance and help them to choose an appropriate insurance product.

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Annexure

Dear respondents,

This Survey is being conducted to know your level of awareness regarding the insurance services provided by banks. The information provided by you will be kept confidential and will be used for academic purpose only.

Sec A Customer's Bank Information

Q1. Where do you hold your Bank Account?
Name of the Bank/Banks

1._____
2._____
3._____

Q2. Out of these Banks, name one you would like to discuss here _____

Q3. For how long have you been dealing with the above bank?
a)   0-3 Years   [ ]   b)   3-6 Years   [ ]
c)   6-9 Years   [ ]   d)   10 or More than 10 Years   [ ]

Q4. What type of Account do you hold in this bank?
a)   Current A/C   [ ]   b)   Saving A/C   [ ]
c)   Recurring A/C   [ ]   d)   Term Deposit A/C   [ ]
e)   Salary A/C   [ ]   f)   Any Other A/C   [ ]

Q5. How frequently do you visit the bank?

a)   Daily   [ ]   b)   Twice a Week   [ ]
c)   Once a Week   [ ]   d)   Fortnightly   [ ]
e)   Monthly   [ ]

Sec B Bancassurance Awareness

Q6. To what extent are you aware of the concept of 'Bancassurance'?
a)   Not at all   [ ]   b)   Partially   [ ]
c)   Significantly   [ ]   d)   Completely   [ ]

Q7. What is the source of information and awareness of such services? (Please Tick any or all).

Sr. No.	Sources of Information	
7a	News Paper or other Print Media	[ ]
7b	Electronic Media (TV) and Internet	[ ]
7c	Direct Mail	[ ]
7d	Information through Phone/Mobile (Telemarketing)	[ ]
7e	Friends/Relatives/Colleagues	[ ]
7f	Sign Boards and Hoardings	[ ]
7g	Bank Staff	[ ]
7h	Bank Brochures/other publications	[ ]
7i	Bank's Web site	[ ]
7j	Exhibitions/Conferences/Awareness Camps organized by Banks	[ ]

Q8. How frequently does your Bank employee/Insurer's representative deals with customers particularly for Bancassurance services?
a)   Daily   [ ]   b)   Weekly   [ ]
c)   Monthly   [ ]   d)   As and when Required   [ ]

Q9. Which product you have purchased?
a)   Tied-up   [ ]   b)   Standalone   [ ]

Sec C Demographic Profile

Q10. Demographic Profile

Name _____

Gender   a) Male   b) Female

Age   a) 18-25   b) 26-40   c) 41- 50   d) 51 and above

Education   a) Under graduate   b) Graduate   c) Post Graduate
              d) Any Other (specify)_____

Individual Income   a) Less than Rs. 10000   b) Rs. 10,001 – 30,000
                    c) Rs. 30,001- 50,000   d) More than Rs. 50,000