

UNDERSTANDING THE RELATIONSHIP OF BENEFICIARIES ATTRIBUTES WITH THEIR ACCESS OF FINANCIAL SERVICES IN MANIPUR

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Abstract

Keywords:

Financial Services;

Access;

Demand Side;

Inclusion.

The main objective of this paper was to measure the relationship strength between the Manipur state beneficiaries attributes and their actual usage of selected financial services (accessing of bank service, purchasing insurance, usage of microfinance service, saving at formal financial institution and credit from formal source). For this measurement, a structures questionnaire was designed and administered to 600 beneficiaries from six districts of the Manipur state. The collected data was analyzed by using the binary logistic regression. The study found that the gender is the highest significant predictor for accessing of banking services. The numbers of family dependent and their average household income of the beneficiaries are good predictors for buying insurance policies. And for usage of microfinance services, the region of the respondent contributes the highest influencing factor. Formal saving behaviors are strongly depending on their family dependent numbers whereas for formal credit taken, the region of the respondent contributes the highest influencing factor in the state.

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1. Introduction

Offering financial services to people can boost the economic condition of backward areas and bring uniformity by savings, promoting more investments and encouraging people who have entrepreneurial ability. Hence, developing the financial sector and improving access to and usage of financial services in rural as well as urban areas is necessary. However, even though the financial Industry have changed and continued to modify their landscape, the necessity of actual usage of financial services by the rural hinterlands still endures. And the demand for the financial services is varied among the people, the province Of The People Dwelling And Their Needs.

2. Review of Literature

The demands of financial services are strongly related to customers' knowledge about finance in the market. Investing in financial literacy can increase one's net returns to saving but they are not causal as their demand depends on the customer preference, their household's resources available (Japalli, T. & Padula, M., 2013). Microfinance ensures the development of poor people by contributing credit for the people who are excluded from the formal institution. It's become the major practice for inclusive growth (Rajendran, 2012). However, The World consumer right day (2010) study reveals that only twenty percent of the rural bankable has access financial services from formal institution. Study from Basu & Srivastava, (2005) state that Northeast of India has low penetration of banking services. High financial literacy in an area would be the extremely important reason for more usage of services. The study also explains that due to unaware of financial literacy of how to invest and save money by the people, more than 50 percent of savings of the household sector are drained in non-financial investments. (Joseph Massey, 2010). Hence, financial literacy is a primary step for financial inclusion. It's not only provide great awareness of financial products and services and it also boost up how an individual can make financial decision about investment, saving and expenditure in their daily life (Srinivasan, 2009). From the experimental work in India and Indonesia finds that both financial literacy and education levels are positive predictors of having a bank account (Cole *et al.*'s, 2009). Access percentage was strongly correlated with per capita income (Honohan, 2008). Sathan, (2008c) studies report that even though the Manipur state demand for banking service is high, the informal financial intermediation has obtain the highest usage of financial services.

The report mentions that this can be the result of distinct physical, cultural and socio-economic identity of north east India.

The demand of insurance and credit is high for low income people but their demands are volatile. Even though the households are often innovative in finding their self protection, the formal financial markets are limited for them (Morduch, 1995). Kaparna, (2011) study has explained that among the Northeast India, Manipur state has the lowest penetration level when compare to all India Level. As a result, this study are focus on the state of Manipur in order to find out which determinants are of more associated to the possible demand of financial services in the state, as the challenges still remain in term of services outreach in many underdeveloped north east states in India.

3. Objectives of the Study

The present study is conducted to test that among beneficiary's socioeconomic, demographic and geographic factors which measure better predictor for their demand of selected financial services. In order to attain this following objectives are framed:

1. To understand the strength of relationship of beneficiaries accessing of bank service with their socioeconomic, demographic and geographic factor.
2. To understand the strength of relationship of beneficiaries purchase of insurance with their socioeconomic, demographic and geographic factor
3. To understand the strength of relationship of beneficiaries usage of microfinance service with their socioeconomic, demographic and geographic factor
4. To understand the strength of relationship of beneficiaries credit taken from formal sources with their socioeconomic, demographic and geographic factor
5. To understand the strength of relationship of beneficiaries saving at formal channels with their socioeconomic, demographic and geographic factor.

4. Research Methodology

The study adopted descriptive and analytical in nature. The respondents are the beneficiaries' from six districts of Manipur.

4.1. Sample Selection and Data Collection:

To know how the people of the state demand selected financial services. Six districts (Imphal West district, Imphal East district, Thoubal district, Bishnupur district, Chandel district and Churachandpur district) were selected. For this study, primary data were collected by structured questionnaires. And their sample size was 600 beneficiaries.

4.2. Data Analysis tools and methods:

To analyse the above objectives, the researcher chosen the tenth independent variables (age, gender, education, occupation, region, household's income, the family dependent number, time taken to reach financial institution, money spent to reach financial institution and distance travel to reach financial institution) which are considered for classifying the actual usage of select financial services in the state. The selected financial services are the accessing of bank service, purchasing insurance, usage of microfinance service, saving at formal financial institution and credit from formal source.

As the main objective for this study is to understand what types of predictors (independent variables) has higher probability for access of select financial services by the beneficiaries in Manipur. To predict this, the binary logistic regression analysis was conducted. Here, the classification method explains how much the classification error rate has been improved by adding the predictors in the test. Then, whether the model is fit and significant will be test by using Hosmer-Lemeshow (H-L) Test of goodness-of-fit. If H-L test statistic is greater than .05, indicates that the model fits the data well. The Wald test and probabilities value offer an index of the significance of each predictor in the equation. So, the Wald test result will be significant for the respective predictors, if the p value is less than .05. Lastly check whether the Exp (B) value is more than 1 or less than 1. The results of the conducting binary logistic regression test are given below.

5. Results and Analysis

5.1. Result of Binary Logistic Regression – ‘Accessing of Bank Services’ by the Beneficiary – Respondents

From the classification method, an overall success rate of 76% of the respondents would predict correctly about the accessing of banking services. Then, the H-L test statistic is greater than .05 that is 0.782, indicates that for accessing banking service the model is reasonably a good fit. The

Wald test result will be significant for the respective predictors, if the p value is less than .05. This analysis result is presented in Table 1. The predictors gender, education, occupation, family dependent number, average household income, nearest distance travel and lowest money spent to reach financial institution by the respondent does make a significant contribution as their p value is less than 0.05. Among the seven significant predictors, gender of the respondent has highest contribution to access of bank account as their significant p value is .000 and the Exp (B) value for gender is 2.352 which are the highest among the significant predictors who exceed 1. Hence, the value 2.352 Exp (B) shows that when the gender of the respondent is raised by one unit, the

Table 1: Accessing of Banking Services: Binary Logistic Regression

Variables	B	S.E.	Wald	Df	Sig.	Exp(B)
Region	0.242	0.24	1.02	1	0.312	1.274
Age	0.003	0.01	0.096	1	0.757	1.003
Gender	0.855	0.231	13.671	1	0	2.352
Education	0.539	0.096	31.549	1	0	0.583
Occupation	-0.14	0.062	5.067	1	0.024	0.869
Dependent Number in a Family	0.193	0.091	4.447	1	0.035	1.213
Household Average Income	0	0	49.016	1	0	1
Nearest Distance Travel to reach Financial Provider	0.285	0.106	7.162	1	0.007	1.33
Lowest Money Spent to reach Financial Provider	0.282	0.125	5.092	1	0.024	1.326
Shortest Time taken to reach Financial Provider	0.187	0.107	3.041	1	0.081	0.83
Constant	0.524	0.902	0.337	1	0.561	1.689

Source: Computed Data

odds ratio is 2 times as large and therefore they are 2 more times likely to belong to the access of bank account. The second most influencing predictor is average household income of the

respondent. Followed by nearest distance travel, lowest money spent to reach financial institution by the respondent and then the family dependent number. Whereas, the predictor region, age and the shortest time taken to reach financial institution by the beneficiaries does not has effect to this model.

5.2. Result of Binary Logistic Regression – ‘Purchasing Insurance’ by the Beneficiary - Respondents

An overall success rate of 92.2% would predict correctly by the respondents when they knew nothing about the variables- insurance policy from the classification. For the model fit, the H-L statistic has a significance of 0 .717 which means that it is not statistically significant and therefore the model is a good fit for purchase of insurance. This analysis result of logistic regression for purchase of insurance is presented in Table 2. The result indicates all amongst the independent variables, the money spent, nearest distance travel, shortest time taken to reach the financial institution, gender, region and the occupation of the respondent are not good predictors for taking insurance policy. However the variables education, average household income and the dependent number in the family of the respondent are the significant predictors to buying of insurance policy. This would add to the predictive power of the model and give significant contribution. Here, the predictors- the number of family dependent members of the respondent does make a highest significant contribution to buying of insurance policy in the state. Then the household income of the beneficiaries stood the second highest predictor and followed by their education.

Table 2: Purchasing Insurance: Binary Logistic Regression

Variables	B	S.E.	Wald	Df	Sig.	Exp(B)
Region	-0.42	0.431	0.95	1	0.33	0.657
Age	-0.029	0.016	3.276	1	0.07	0.971
Gender	-0.058	0.431	0.018	1	0.893	0.944
Education	-0.595	0.169	12.36	1	0	0.552
Occupation	-0.046	0.128	0.13	1	0.719	0.955
Dependent Number in a Family	0.337	0.155	4.747	1	0.029	1.401
Household Average Income	0	0	24.64	1	0	1

Nearest Distance Travel to reach Financial Provider	0.086	0.219	0.155	1	0.694	1.09
Lowest Money Spent to reach Financial Provider	-0.113	0.261	0.188	1	0.664	0.893
Shortest Time taken to reach Financial Provider	0.414	0.229	3.281	1	0.07	1.513
Constant	5.676	1.744	10.59	1	0.001	291.7

Source: Computed Data

5.3. Result for Binary Logistic Regression - 'Usage of Microfinance Service' by the Beneficiary – Respondents

From the classification, the study found that 85.2 % of the respondent would predict correctly for the usage of microfinance. To test whether the model is fit and significant for microfinance access by the beneficiaries, H-L Test of goodness-of-fit are performed. The value of H-L test is 0.59, indicates that the model fits the data well. The result for the binary logistic regression for usage of microfinance is presented in Table 3. The Wald test results illustrate that the predictors- the age, gender, region and lowest money spent to reach nearest microfinance institution by the respondent does make a significant contribution to usage of microfinance services as their p value is less than 0.05. Here, the region of the respondent contributes to the highest influencing factor for usage of microfinance services. That means it is the good predictor for dependent variable since their Exp (B) value for region is 5.143 which is the highest among the significant predictors which exceed 1. It reveals that when the region of the respondent is raised by one unit, the odds ratio is 5 times as large and therefore they are 5 more units likely to use of microfinance. The second most influencing predictor is lowest money spent to reach microfinance institution by the respondent. The next influencing predictors are the age and the gender of the respondent. The remaining predictors like education, occupation, average household income, the dependent members in the family, distance travelled and the tim spent by the respondent to reach MFI does not have effect on the usage of microfinance service.

Table 3: Usage of Microfinance Services: Binary Logistic Regression

Variables	B	S.E.	Wald	Df	Sig.	Exp(B)
Region	1.638	0.391	17.51	1	0	5.143
Age	-0.029	0.013	5.112	1	0.024	0.971
Gender	-2.699	0.33	67	1	0	0.067
Education	-0.12	0.115	1.075	1	0.3	0.887
Occupation	0.05	0.075	0.441	1	0.507	1.051
Dependent Number in a Family	0	0	2.358	1	0.125	1
Household Average Income	-0.144	0.126	1.305	1	0.253	0.866
Nearest Distance Travel to reach Financial Provider	-0.323	0.179	3.254	1	0.071	0.724
Lowest Money Spent to reach Financial Provider	0.427	0.142	9.041	1	0.003	1.533
Shortest Time taken to reach Financial Provider	-0.082	0.114	0.517	1	0.472	0.922
Constant	6.02	1.223	24.21	1	0	411.5

Source: Computed Data

5.4. Result of Binary Logistic Regression – ‘Credit from Formal Sources’ by the Beneficiary – Respondents

The possible percentage of the respondents who take credit from formal sources with correctly is 78.7%. Thus this model is still ok. Now, for model fit and significant for credit taken from the formal source, H-L test statistic value is 0.309, indicates that the model fits the data well. For the respondent who takes credit from the formal source, a binary logistic regression result is presented in Table 4. This Wald test result illustrates that the predictors- the gender, region, education and average household income of the respondent do make a significant contribution for credit taken from the formal source as their p value is less than 0.05.

Table 4: Credit from Formal Sources: Binary Logistic Regression

Variables	B	S.E.	Wald	Df	Sig.	Exp(B)
Region	1.32	0.29	20.79	1	0	3.745
Age	-0.017	0.01	2.671	1	0.102	0.984
Gender	-1.088	0.23	22.3	1	0	0.337
Education	-0.251	0.094	7.113	1	0.008	0.778
Occupation	0.11	0.064	2.954	1	0.086	1.116
Dependent Number in a Family	-0.006	0.092	0.004	1	0.95	0.994
Household Average Income	0	0	7.813	1	0.005	1
Nearest Distance Travel to reach Financial Provider	-0.181	0.105	2.967	1	0.085	0.834
Lowest Money Spent to reach Financial Provider	-0.233	0.135	2.966	1	0.085	0.792
Shortest Time taken to reach Financial Provider	0.023	0.113	0.041	1	0.84	1.023
Constant	3.827	0.941	16.54	1	0	45.946

Source: Computed Data

Here, among the significant predictors, the region of the respondent contributes to the highest influencing factors for credit taken from the formal source. That means it is the good predictor for dependent variable since their Exp (B) value for region is 3.745 which is the highest among the significant predictors which exceed 1. It tell that when the region of the respondent is raised by one unit, the odds ratio is approximately four times as large and therefore the beneficiaries are 4 more units likely to take credit from formal sources. The second most influencing predictor is the average household income of the respondent, followed by the education and the gender of the respondent. The remaining predictors are not showing such significance to usage of credit from formal sources.

5.5. Result of Binary Logistic Regression – Saving at Formal Channels by the Beneficiary – Respondents

The possible percentage of the respondent who did the formal source of saving accurately would be 90.5 % of the time. The H-L test statistic value the formal source of saving is greater than .05

that is .634, indicates that the model fits well for the data. The results from the binary logistic regression with the first test for the formal source of saving shown in Table 5 illustrate that the predictors- the region, education, the family dependent number and the average household income of the respondent show a significant to the formal source of saving as their p value is less than .05. Here, among the significant predictors, the family dependent numbers of the respondent give the highest influencing factor for the formal source of saving. That mean it is the good predictor for dependent variable. The second most influencing predictor is the average household income of the respondent, followed by education and the region of the respondent. The remaining predictors are showing not significant to prediction on the formal source of saving.

Table 5: Saving at Formal Channels: Binary Logistic Regression

Variables	B	S.E.	Wald	Df	Sig.	Exp(B)
Region	-0.994	0.339	8.599	1	0.003	0.37
Age	-0.03	0.014	4.715	1	0.3	0.971
Gender	-0.096	0.348	0.077	1	0.782	0.908
Education	-0.356	0.132	7.311	1	0.007	0.701
Occupation	-0.04	0.098	0.166	1	0.683	0.961
Dependent Number in a Family	0.377	0.132	8.108	1	0.004	1.458
Household Average Income	0	0	15.357	1	0	1
Nearest Distance Travel to reach Financial Provider	-0.015	0.155	0.009	1	0.924	0.985
Lowest Money Spent to reach Financial Provider	0.123	0.177	0.487	1	0.485	1.131
Shortest Time taken to reach Financial Provider	0.091	0.159	0.331	1	0.565	1.096
Constant	5.584	1.357	16.931	1	0	266.194

Source: Computed Data

6. Conclusion

In the present study, the researcher discovered that gender of the beneficiary respondent is the highest significant predictors for accessing of banking service, followed by average household income, nearest distance travel, lowest money spent to reach financial institution by the respondent. Whereas the predictors- region, age and the shortest time taken to reach financial provider does not show any effect on the access of banking service by the state beneficiaries. In case for buying insurance policies, the predictors that is the family dependent number and their average household income of the respondent are good predictors whereas the other remaining variables are not good predictors for buying insurance policies by the beneficiaries. For microfinance, the region of the respondent contributes the highest influencing factor for usage of microfinance, followed by the lowest money spent to reach microfinance institution, age and the gender of the respondent. For saving behavior at formal financial institution of the state beneficiaries are strongly depend on their family dependent number. And the second most influencing predictor is the average household income of the respondent. Whereas in case for formal credit taken, the region of the respondent contributes the highest influencing factor. The second most influencing predictor is the average household income of the respondent.

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