

# Impact of Financial Inclusion Programmes on Customers' Welfare (A Comparative study of Punjab and Haryana)

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## ABSTRACT

*For achieving the goal of financial inclusion the demand side constraints which relates to customers, need to be examined so that remedial measures can be taken to address the issues. Banks and other financial institutions alone cannot bring people out of poverty by making available various financial products like savings, finance and insurance, the success of the financial inclusion plans lies in the hand of those who use these products and services in a manner that lead to their economic wellbeing. The present paper endeavours to study the perception of bank customers of Punjab and Haryana regarding financial inclusion programmes on the basis of various factors such as Convenience, Social Welfare and Financial Benefit.*

## INTRODUCTION

Financial Inclusion is the process of ensuring access to financial services, timely and adequate credit when needed by weaker sections and low income groups at an affordable cost. It is important to understand that a person with a reasonable access to all essential financial services is considered 'Financially Included'. It ensures improved and better sustainable economic and social development of the country. It helps in the empowerment of the underprivileged, poor and women of the society with the mission of making them self-sufficient and well-informed to take better financial decisions.

Financial inclusion is an important step towards inclusive growth. It helps in the overall economic development of the disadvantaged population. Financial inclusion is also considered to be a business opportunity for the formal financial institutions. It would help them in penetrating into unbanked areas and thereby attaining profit. Besides the bankers, the developmental authorities also have a major role in developing the supportive infrastructure, both physical and social. Literacy, health and communication are some of the essential ingredients needed for inclusive growth. To conclude, the four pillars of inclusive growth are productivity, employment, financial inclusion and infrastructure development.

From the demand side, there are number of reasons for the rural poor remaining excluded from the formal banking sector such as, high transaction costs, lack of Proper Documentation, lack of awareness, lack of social capital, non-availability of ideal products, small volumes / size of transactions which are not encouraged by formal banking institutions, hassles related to procedures in the formal system, easy availability of informal sources of finance and prior experience of rejection by the formal banking system

## OBJECTIVES OF THE STUDY

1. To find out the impact of financial inclusion programmes on customers' welfare.

2. To compare the perception of bank customers with regard to various factors between the states of Punjab and Haryana.

## SOURCES OF DATA COLLECTION

The study is based on primary data collected from 200 bank customers comprising of 100 customers of lead banks each from the states of Punjab and Haryana with the help of self designed structured Questionnaire.

## DATA ANALYSIS AND INTERPRETATION

For the purpose of the study exploratory factor analysis and Independent samples t-test has been applied to the data along with descriptive statistics.

For the assessment of the impact of Financial Inclusion programmes on customers' welfare, 16 statements which were measured on 5 point likert scale signifying 1 for (Not at all), 2 for (Up to a Small extent), 3 for (Up to a Moderate extent), 4 for (Up to a Reasonable extent) and 5 for (Up to a Great Extent). Reliability analysis has been done to check the internal consistency of the statements.

**Table 1.1 Reliability Analysis**

Cronbach's alpha	N of Items
0.765	16

Cronbach's alpha value is calculated in Table 1.1 obtained from 16 statements describing perception of the customers regarding evaluation of the impact of Financial Inclusion Schemes. The value of Cronbach's alpha is 0.765 which is above the desired value of 0.70 (Malhotra, 6e) justifies the reliability of the scale used.

Table no. 1.2 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Adequacy	Measure of Sampling	.682
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Bartlett's Test of Sphericity	Approx. Chi-Square	275.284
	df	105
	Sig.	.000

In order to measure the sampling adequacy and to examine the suitability of data for applying factor analysis, the Kaiser-Meyer Olkin (KMO) and Bartlett's Test of Sphericity were applied. Table no. 1.2 shows the KMO and Bartlett's Test values. KMO value (0.682) which is above the threshold level of (0.5) which indicates that factor analysis could be used for given set of data and the (p-value) for Bartlett's Test of Sphericity is (0.000) which is less than (0.05), shows that Bartlett's test is significant.

**Principal Component Analysis**

Communalities show the variance in the variables which is explained by the extracted factors. Under principal component analysis the initial variance of all the statements before extraction is at common level which is 1. The communalities after extraction indicate the common variance in the data set.

**Factor Extraction**

The eigen values associated with each linear component i.e. factor before extraction, after extraction and after rotation. The eigen values calculated with each factor represent the variance explained by that particular linear component and also the eigen value in terms of percentage of variance explained has been shown in the table. Three factors with eigen values more than 1 have been retained.

**Table 1.3 Total variance explained**

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.92	49.947	49.947	7.92	49.947	49.947	4.26	26.85	26.850
2	2.03	12.520	62.467	2.03	12.520	62.467	3.48	22.76	49.611
3	1.25	7.659	70.336	1.25	7.659	70.336	3.47	20.72	70.336
4	.882	5.515	75.641						
5	.843	5.267	80.907						
6	.640	3.998	84.906						
7	.576	3.600	88.506						
8	.455	2.844	91.349						
9	.380	2.377	93.727						
10	.309	1.932	95.659						
11	.209	1.303	96.962						
12	.151	.944	97.906						
13	.140	.878	98.783						
14	.109	.684	99.467						
15	.049	.308	99.776						
16	.036	.224	100.000						

Extraction Method: Principal Component Analysis.

Table 1.3 shows the total variance explained in which the eigen values associated with each component is computed. Eigen values indicate the percent of variance explained by each factor. First part of the table shows the Initial eigen values indicates that First Factor explains 49.94% of the variance, Second Factor explains 12.52% and the Third Factor explains 7.65% of the variance. Second part of the table shows the extraction sum of squared loadings, the extraction of factors has been done, only those factors which have eigen values more than one have been retained, In this case three factors have eigen value more than one and together all these extracted factors explain 70.33% of the variance. Third part of the table shows the rotation sums of squared loadings in which the eigen

values of the factors after rotation are shown. After rotation it has been observed that now Factor 1 explains 26.85% of the variance, Factor 2 explains 22.76 % of the variance and Factor 3 explains 20.72% of the variance.

**Rotated Component Matrix**

Rotation of factors is done to equalize the importance of all the factors. Varimax rotation procedure have been used which is an orthogonal method of rotation that minimizes the number of variables with high loadings on a factor and increases the interpretability of a factor.

**Table No. 1.4 Rotated Component matrix**

	Component		
	1	2	3
Simplicity in Banking Procedures	.858		
Improvement in transparency level	.847		
Improvement in mobile/e-banking service	.797		
Improvement in standard of living	.725		
Better redressal of grievances	.693		
Enhancement of Risk coverage		.769	
Improvement in Social security		.762	
Improvement in credit counseling service provided by Bank		.751	
Decrease in use of Informal Sources of finance		.706	
Increase in usage of Technology		.686	
Improvement in receipts into bank account			.778

Increase in usage of credit products			.761
Improvement in Economic condition			.727
Improvement in my Financial awareness			.671
Improvement in transfer of payment mechanism			.630
Increase in Deposits/Savings with Bank			.621

Rotation: Varimax with Kaiser normalization.

Rotation converged in 5 iterations.

Table No. 1.4 reflects the Rotated Component Matrix which shows the factor loadings of the statements. Identification of the statements that load onto the same factor on the basis of underlying theme has been done.

The statements that loaded on-to Factor 1 includes “Simplicity in Banking Procedures”, “Improvement in transparency level”, “Improvement in mobile/e-banking service”, “Improvement in standard of living” and “Better redressal of grievances”, as these five statements seems to relate with the common theme of ease of getting services from bank, hence labelled as Convenience. The statements that loaded on-to Factor 2 includes “Enhancement of Risk coverage”, “Improvement in Social security”, “Improvement in credit counselling service provided by Bank”, “Decrease in use of Informal Sources of finance” and “Increase in usage of Technology”, as these five statements seems to relate to the customer needs and social aspects, hence labelled as Social Welfare. The statements that loaded on-to Factor- 3 includes “Improvement in receipts into bank account”, “Increase in usage of credit products”, “Improvement in Economic condition”, “Improvement in financial awareness”, “Improvement in transfer of payment mechanism” and “Increase in Deposit/Savings with Bank” as these six statements seems to relate to the financial aspect, hence labelled as Financial Benefit.

**Comparative analysis between the states of Punjab and Haryana by using Independent Sample t-test on Regression Factor Scores:**

Customers perceive Convenience, Social Welfare and Financial Benefit as the contributing factors towards the performance of Financial Inclusion Schemes. For the purpose of the study and to have comparative analysis between the states of Punjab and Haryana the factors were converted into Regression Factor Scores and comparison of these dimensions has been done with the help of descriptive statistics and independent sample t-test:

**Table 1.5 Independent Samples t-test on Regression Factor Scores**

		Levene's Test for Equality of Variances					
		F	Sig.	t	df	Sig.(2-tailed)	Mean Difference
REGR factor score 1 for analysis (Convenience)	Equal variances assumed	.033	.856	-.115	198	.909	-.016
	Equal variances not assumed			-.115	197.97	.909	-.016
REGR factor score 2 for analysis (Social Welfare)	Equal variances assumed	.917	.339	2.865	198	.005	.397
	Equal variances not assumed			2.865	195.82	.005	.397
REGR factor score 3 for analysis (Financial Benefit)	Equal variances assumed	.165	.685	-.775	198	.439	-.109
	Equal variances not assumed			-.775	197.85	.439	-.109

Table No. 1.5 shows Independent sample t-test applied to the regression factor scores of three dimensions named as Convenience, Social Welfare and Financial Benefit. For the purpose of the study following H0a, H0b, H0c (Null Hypothesis) have been formulated:

H0a: There is no significant difference between the perception of bank customers from Punjab and Haryana on the basis of Convenience.

H0b: There is no significant difference between the perception of bank customers from Punjab and Haryana on the basis of Social Welfare.

H0c: There is no significant difference between the perception of bank customers from Punjab and Haryana on the basis of Financial Benefit.

On the dimension of Convenience the (p-value) of the levene’s test of equality of variance is (0.856) which is more than 0.05 so the values of equal variance assumed has been

taken into consideration. The (p-value) computed for the t-test in this case came out to be (.909) which is more than 0.05 states that H0a has been accepted which implies that there is no statistical significant difference between the perception of bank customers from Punjab and Haryana on the basis of convenience. The mean difference is (-0.016), implies that bank customers from both the states of Punjab as well as Haryana were having similar perception about the dimension of convenience.

On the dimension of Social Welfare the (p-value) of the levene’s test of equality of variance is (0.339) which is more than 0.05 so the values of equal variance assumed has been taken into consideration. The (p-value) computed for the t-test in this case found to be (.005) which is less than 0.05 states that H0b has been rejected which implies that there exists a statistical significant difference between the perception of bank customers from Punjab and Haryana on the basis of Social Welfare. The mean difference shows positive value (0.397),

implies that the bank customers from Punjab were having better perception about Social Welfare than that of bank customers from Haryana.

On the dimension of Financial Benefit the (p-value) of the levene's test of equality of variance is (0.685) which is more than 0.05, so the values of equal variance assumed has been taken into consideration. The (p-value) computed for the t-test in this case came out to be (0.439) which is more than 0.05 states that  $H_0$  has been accepted which implies that there is no statistical significant difference between the perception of bank customers from Punjab and Haryana on the basis of Financial Benefits. The mean difference is (-0.109), implies that the bank customers from both the states of Punjab as well as Haryana were having similar perception about Financial Benefits.

## CONCLUSION

The present study provided the analysis of the opinion survey of the bank customers. Both descriptive statistics and

inferential statistics were used to analyze the data. Weighted average score, Exploratory Factor Analysis and Independent Sample t-test were used to test the Hypothesis. The findings of Factor Analysis revealed that bank customers perceived Convenience, Social Welfare and Financial Benefit as the contributing factors of their welfare. Results of the comparative analysis between the states of Punjab and Haryana on the basis of independent sample t-test implies that both the bank customers from Punjab as well as Haryana were having similar perception about Convenience, the bank customers from Punjab were having better perception about Social Welfare than that of Haryana and the bank customers from both the states of Punjab as well as Haryana were having similar perception about Financial Benefits. Thus it can be concluded that significant improvements in field of financial inclusion are required to meet the diverse needs of customers.

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