

## FINANCIAL ASSISTANCE ON CUSTOMERS' PURCHASE DECISION: A STRUCTURE EQUATION MODELING APPROACH

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### Abstract

**Purpose** – The main purpose of this study was to investigate the features of financial assistance from financial institutions, especially, in auto loan segment and the impact of those features on customer's financial purchase decision to buying any automobile products (two wheelers, three wheelers, and four wheelers), with special reference to their state, gender, geographic area and family type.

**Design/methodology/approach** - The conceptual framework was developed after extensive review of past research. Thus, data was collected through a mail-intercepts approach and personal interview method from customers of auto loan residents of Punjab and Chandigarh. The data was analyzed using data reduction factor analysis technique and multiple group analysis through structure equation modeling technique.

**Findings** – Results suggest that all five factors of financial assistance have a direct impact on customer's financial purchase decision whether they are male or female, residents of Punjab or Chandigarh, married or individual, and last but not least, nuclear family or joint family.

**Practical implication** – The present study shows that automobile industry and the role of available auto loan facility can surge the number of auto loan holders, increases the sale of all automobile products, the overall growth of automobile segment, and last but not least, enhancement in the social status of people.

**Keywords:** Financial assistance, Auto loan, Automobile products, Financial purchase decision, Financial institutions

### INTRODUCTION

The backbone of every developed and developing economy across the globe is an efficient financial system as well as robust financial system acts as a powerful engine of economic development by mobilizing resources and allocating the same to their productive uses (sooloo, 2016). Nowadays, in India, various public banks, private banks and non-banking financial companies filling the gap between surplus and deficit among countrymen. Therefore, they all playing an immense role to connect the public with financial services and uplift their societal life by rendering them all financial services at affordable rate, auto loan facility is one of those. Autonomous vehicles are not only part of the story, rather, the convergence of the consumer and automotive technologies and the rise of mobility services are transforming the automotive industry and the way we live our lives (Gary Silberg, partner KPMG LLP). Universally, the automotive industry has been accepted as a major driver of growth of a nation's economy and is a significant contributor to

the global economy (Souresh Bhattacharya, 2014). Presently, all banking and non-banking companies making it reality as availability of auto loan facility for every walk of lives and steadily contributing to an overall enhancement of the economy and social status of the people.

### LITERATURE REVIEW

A single unit of lending money can be returned in fairway if there is an adequate accessibility of borrowing for people (Schlesinger et al. 1987, Laroche et al. 1986, Riggall 1980, Javalgi et al. 1989, Kayanak and Kucukemiroglu 1992, Boyd et al. 1994, Holstius et al. 1995, Zineldin 1996, Hafeezur and Saima 2008, Pietro Calice et al. 2012, Sonu Garg and Parul Agarwal 2013, Kewal Kumar 2013, Vikram Shende 2014). However, there is a key element which determines the customer's mind which considers lending rates offered by banks worthy enough to approach any banks for lending purpose (Schlesinger et al. 1987, Hans Degryse and Patrick Van Cayseele. 1999, Attanasio et al 2008, Christos C. Frangos et al. 2012, Archana A. Mahajan 2013,

Centenary Bank 2013, Joseph Chisasa and Winnie Dlamini 2013, M.E. Doddaraju 2013, Vikram Shende 2014). Nowadays, fast and efficient services are need of the hours and people do not want to lose the even tiny amount of time to get financial services (Erol et al.1990, Kazeh and Decker 1993, Boyd et al 1994, Haron et al.1994). On the other hand, loyalty is determined by the customers for a financial institution, their reputation and a large number of people who recommend for such financial institutions (Zineldin 1996). It is indeed that people give preference to those financial institutions, which deal in easy EMI options that meet the customer's expectation as per their monthly budget (Barchana A. Mahajan 2013, Vinayagamorthy and M. Somasundaram 2013, Sarika.R. Lohana 2014). However, many researchers has witnessed that safety and security both two elements determined the people's attention whether they want financial services or not, until they get assurance from financial institutions that their dealings would be secured and safe (P. Venugopal 2013, Seema U. Purohit et al. 2012, Agwu and M. Edwin 2014). Whereas most interesting evidence from past studies revealed that people often moved to those institutions who's having friendly staff which deals regularly with customer in very please manners (Kazeh and Decker 1993, Haron et al. 1994) and some banks have been worked on customer relationship strategy so that they can retain their customer (Peppers and Rogers 2004, Tejinderpal Singh 2011, Manju Puri et al. 2011, Sanjay Kanti Das 2012). Even though, the success rate of any types of loan directly dependence upon 'Service charges' charged by the financial institutions prior to their initial loan approval process and this defined the competitiveness among financial institutions in market considering the 'Service Charge' limit (Kazeh and Decker 1993,) Srivastava Rajesh Kumar 2007, M.E. Doddaraju (2013).

Despite, the loan agreement between customer and money lender alone is not sufficient without fulfilling the legal formalities and it contained a number of other documents (Vinod K. Agarwal 1999, Srivastava Rajesh Kumar 2007). Indeed, availability of financial institutions and financial services have been playing a crucial role in the self-reliability of people which made them independent, zero dependencies on friends, colleagues, and

family members (Kewal Kumar 2013, Porkodi and D. Aravazhi 2013). Nevertheless, customers of any financial institutions have been sought safe mechanism which prevents any sort of fraud and misrepresentations in documentations (Ajala Oladayo Ayorinde (2013). Importantly, customers feel comfort and time saver if financial institutions have a threshold for repayment of the loan through various online mode (Ari Hyytinen and Tuomas Takalo 2008, Samuel et al. 2012, Archana A. Mahajan 2013). Many other factors are down payment, tax rebate, insurance facility for vehicles, e-banking services, and auto loan financing schemes inculcate the feeling among people to get financial assistance from financial institutions, (Susilawati Connie et al. 2001, Bertrand, M. and Morse, A. 2011, S. S. Thakur and J. K. Singh 2013, Chilumuri Srinivasa Rao 2013). There is a key component of underlying financial assistance from financial institutions which has been discussed in this chapter. On the basis of respondent's demographic attributes conceptual framework model has developed which help in to investigate the effect of financial assistance on customers' belongs to Punjab and Chandigarh and Male Vs. Female. To explore the causal relationship between the variable in the present study, followings are the extracted hypothesis from literature for this paper.

HO1: There is no significant loading of all the extracted factors towards purchase decision of automobile loan seekers

HO2: There is no significant effect of extracted factors of financial assistance on purchase decision of respondents belong Punjab and Chandigarh.

HO3: There exists no significant impact of extracted factors of financial assistance on purchase decision of rural as well as urban auto loan customers.

HO4: There is no significant effect of extracted factors of financial assistance on purchase decision of respondents belong to male and female group.

HO5: There is no significant effect of extracted factors of financial assistance on purchase decision of the nuclear family and joint family cluster.

## **Method**

**Descriptive Design:** The kind of conclusive research design adopted for the present study was descriptive in nature. In this study, both

quantitative and qualitative research methods had been employed and emphasis laid on the quantitative research.

**Sampling Design:** In this study, the sample of the study was based on convenience sampling (Non-probability sampling technique). First and foremost, Punjab state and capital of state Chandigarh considered for population subtraction. Therefore, keeping the time constraints in mind and the size of the population who were customers of Banks and NBFCs and they obtained an auto loan for buying automobile products. In a nutshell, this present research work included the individual who is employed and having a social life. The survey had been conducted via emails and through personal interviews.

**Sample Size:** A total 850 survey questionnaires were distributed to customers of financial institutions (Public Banks, Private Banks, and NBFCs) and they have accessed auto loan facility for the purpose of buying any automobile product (Two wheelers, Three Wheelers, and Four Wheelers) out of which 810 questionnaires received but 16 questionnaires were incomplete and final 794 questionnaires were used for analysis purpose. This represents a success rate of 99.24%, which was reckoned to be good in view of time and cost constraints.

**Scale Development and Testing Validity:** Scale development is widely adopted on graduate's courses in psychology, public health, nursing, education, and marketing, and has proved invaluable to applied research across the social science (Robert F DeVellis 1991).

There are several procedures to compute the reliability. Some of them are Alternate or Parallel-forms, Test-Retest (Repetition), Split-half technique and Rational Equivalence. However, the single method is not perfect so in the present study we had relied on a series of diagnostic criteria to assess internal consistency as hereunder: the reliability coefficient (Cronbach's alpha)  $\geq 0.6$  general constructs and  $\geq 0.4$  for broadly defined constructs, Item-to-total correlation (Correlation of the item to summated scale)  $\geq 0.5$ , Inter-item correlation (Correlation among items within a factor)  $\geq 0.3$ , the Eigenvalue should be  $\geq 1.0$ , the constructs should have at least loading of two items, Bartlett's test of

sphericity: a test for the presence of correlation among variables. It shows the statistical significance that the correlation matrix has a significant correlation among at least some of the variables. The value is acceptable for  $p$  (level of significance)  $\leq 0.05$ . Lastly, the reliability measures derived from a confirmatory factor analysis focus on constructing reliability where: *Construct Reliability* = Sum of squares of factor loading/ (sum of squares of the factor loading + sum of error variance terms for constructs). Various fit indices like TLI, CFI, and RMR etc. may also be considered for SEM. (Hair et al., 2009). Whereas convergent validity

**Sensitivity:** The sensitivity of the scale used for this research is a crucial part to measure the general attitude of the people regarding financial services, especially, auto loan facility. Sensitivity used as an instrument which accurately evaluated the variability in this research. Further, a dichotomous response category such as disagree and agree does allow the transcription of any attitude change. Indeed, in this study, five points Likert scale was used as the categories sensitivity of the scale.

**Statistics Techniques:** factor analysis has employed to reduce redundancy among various statements used for observation and therefore, the casual relationship has checked through structure equation model (multiple group analysis) between Punjab and Chandigarh customers, and Male vs. Female customers, Rural vs Urban customers, and customers from either nuclear family or joint family.

## Analysis and Results

### Demographic Profile of the Respondents

In descriptive statistics, the majority of respondents' auto loan holders belong to Punjab (594, 74.95%) and 199 (25.1%) represents the Chandigarh. On the other hand, respondents who have accessed the auto loan facility residing big number in a rural area (552, 69.5%) whereas very few number of customers identified as rural customers (242, 30.5%). In the next category, gender-based identification of automobile customers represents the male category by 620 (78.1%) customers, but only 174 (21.1%) of the customers were female out of 794 total sample population. Further, 553 (69.6%) were married and 241 (30.4%) still a bachelor, but the big number of the automobile customers having age between 20

to 40 years old constituted 516 (almost 65 %) out of total population. Importantly, a very big number of customers held graduate and post graduate degree, followed by professionals, 331(41.7%), 260 (32.7%), and 105 (13.2%), respectively. Regardless, the majority of customers 319 (40.2%) have been employed in private business concern, 308 (38.8%) working in government offices, and only 167 (21%)

having a self-owned business. It was noticed that majority of auto loan customers were more than two family members per family ( 2 to 5, 552 (69.5%)), and due to modernization of families 523 (65.9%) of auto loan customers represents nuclear family which very few as compared to joint family's auto loan customer 271 (34.1%).

**Table 1.1: VARIMAX–ROTATED RESULTS AND SCALE RELIABILITY FOR PURCHASE DECISION REGARDING BUYING AUTOMOBILE VEHICLES THROUGH FINANCIAL INSTITUTIONS**

	Variables	Component				
		1	2	3	4	5
PD8	Protection against risk	<b>.777</b>				
PD11	Depend very less on friends, colleagues and family members	.759				
PD4	financial institutions change your purchasing ideas	.741				
PD15	financial advisory help	.728				
PD13	Buy easily any dream vehicle	.714				
PD7	Tax relaxations	.660				
PD6	Rate of interest according to your budget		<b>.806</b>			
PD2	Enhancement in social status		.780			
PD1	Half price courage		.759			
PD3	Banks and NBFCs uplift your decision power		.751			
PD5	Meet your purpose and satisfied yourself		.734			
PD19	Enhance your decision making power			<b>.820</b>		
PD18	No regret after obtaining financial assistance decision			.818		
PD17	Confusion upon selections of one financial institution			.789		
PD16	Decisions about how to change your social status			.679		
PD20	No help from blood relation				<b>.806</b>	
PD10	Attractive interest schemes				.792	
PD9	Buy any two, three or four wheeler				.759	
PD14	0% interest schemes, insurance coverage, warranty etc					<b>.850</b>
PD12	Repayment through tiny installments					.819
<b>Eigen Value</b>		9.991	1.491	1.286	1.247	1.042
<b>% Variance</b>		49.954	7.454	6.431	6.235	5.211
<b>Cumulative % Variance</b>		49.954	57.408	63.839	70.073	75.284
<b>Scale Reliability Alpha</b>		.851	.850	.857	.860	.895
<b>Cronbach's Alpha = .946, Kaiser-Meyer-Olkin Measure of Sampling Adequacy= .934, Bartlett's Test of Sphericity (Approx. Chi-Square =1.164, Df=190,Sig=.000, Mean= 48.9345</b>						

The factor analysis of the twenty variables; this analysis extracted five factors from the variables related to influencing the purchase decision of customers who purchased either two wheelers, three wheelers and four wheeler with the help of financial institutions (auto loan), each factor was defined by at least two scale items.

The Bartlett's Test of Sphericity also has a value  $X^2 = 1.164$ ,  $df = 190$ , which is significant ( $p \leq 0.5$ ). Thus, Kaiser-Meyer-Olkin Measure of Sampling Adequacy .934 given the permission to employ factor analysis and all these requirements are sufficient for validating factor analysis. The five factors identified using the factor analysis is shown in table 1.1. All the factors load more than .7 except the one variable, the loading ranged from .660 to .850. The five factors so generated have Eigenvalues ranging from 1.042 to .991 and the scale reliability of each factor are  $> .7$  good enough to carried out the analysis of data. All five factors extracted explained the 75.284% variance in the purchase decision of customer held auto loan facility. These five factors are explained as below:

✓ **Factor one (Building Independency):** This factor is imperative explains 49.954% of the total variance and contain Eigenvalues of 9.991. Further, this factor included the six variables which make this one factor namely; *Protection against risk, Dependency very less on friends, colleagues and family members, financial institutions changes your purchasing ideas, financial advisory help, buy easily any dream vehicle and Tax relaxation.* All these variables are taken into account as they predominantly predict the way where anyone who is ready to buy any automobile vehicle with the help of financial institutions

✓ **Factor Two (Supportive in all Aspect):** The second factor is explaining 7.454% of the total variance in the factor analysis and it is labeled as "Supportive in all Aspect). It contains five variables; i.e., *Rate of interest according to your budget, Enhancement in Social status, Half price courage, Financial institutions uplift your decision power and Meet with your purpose and satisfy you.* The results reveal that respondents are of the opinion that financial institutions must emphasize their policy and strategy in such a direction, where people who seek financial help from them must obtain all kind of support in every possible manner. Therefore,

they can feel 'Feel Good' policy factor of all financial institution, if people take financial assistance from financial institutions.

✓ **Factor Three (Decision Making Power);** This third factor threw lights in the direction where people expected to make their decision more powerful if they get financial help from financial help for purchasing any automobile vehicle. It explains 6.437% of the total variance and Eigenvalue of 1.286. in addition, it covered; *Enhances your decision-making power, No regret after obtaining financial assistance decision, Confuse upon to select one financial institution, and lastly, the decision about how to change your social status.* These five variables indicate the views of respondents as they demanding more convenient all type of financial services. Essentially, it can improve the overall decision-making thinking of the people.

✓ **Factor Four (Wider Access);** The fourth factor might be labeled, (Wider Access), it entails three variables; i.e., *No help from blood relation, Attractive interest schemes, and buy any two, three and four wheeler vehicle.* It infers that respondents seek wider access to financial assistance from all financial institutions to buy any kind of automobile vehicles. The majority of respondents show their opinion as they do not want to get financial help from blood relation if they already taking financial help from financial institutions. This factor account for 6.235% variance in customers purchases decision due to all aforesaid three variables.

✓ **Factor Five (Security for Burden of Loss);** This is the last important factor which explains the 5.211% of the total variance and Eigenvalue of 1.042. It covered only two items covers here are; *0% interest schemes, insurance coverage, warranty etc, and repayment through tiny installments.* These components are more helpful to know the mentality level as well as perception level of people to some extent.

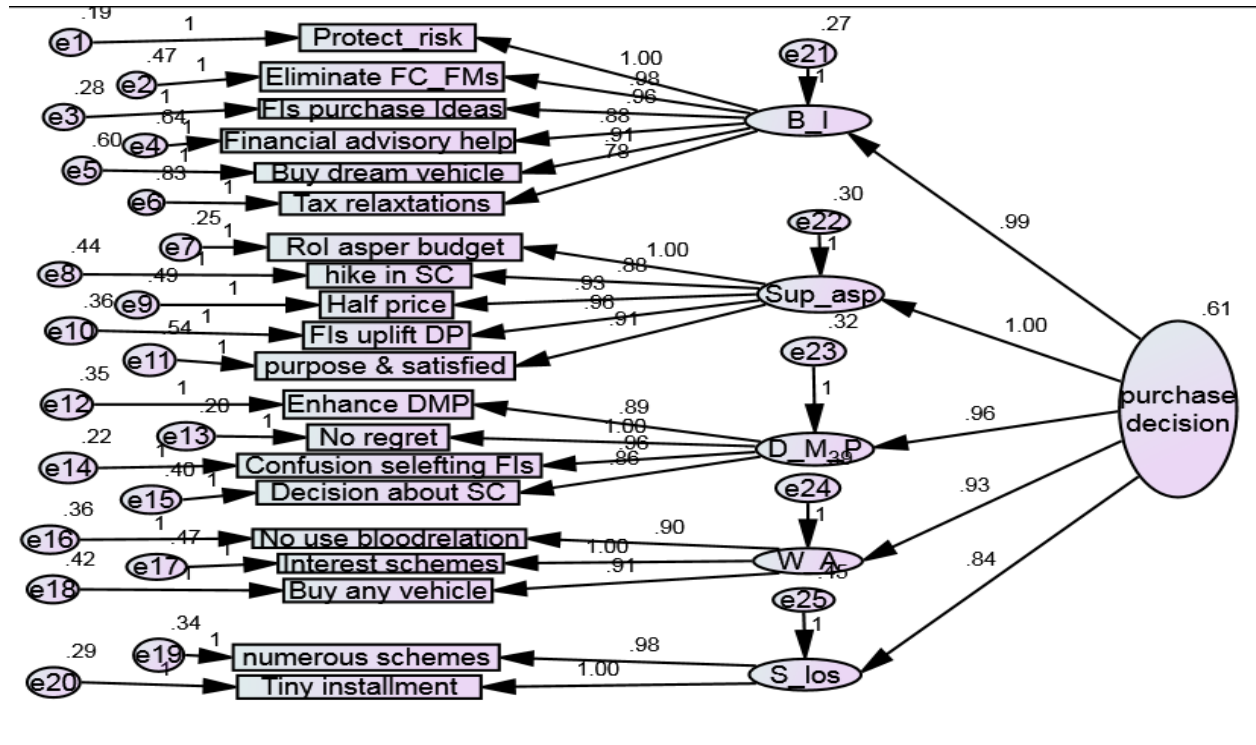
#### **Structural Model: Path Analysis**

Confirmatory factor analysis is employed to test the reliability and validity of the variables used in questionnaires after obtaining the questionnaires. However, the loading factor values of each manifest variables are higher than 0.6, the recommended entry value is .06(Bagozzi & Yi, 1988), and revealing that internal consistency and convergent validity

are good; composite reliability (Construct reliability) and the Chronbach's  $\alpha$  value of each construct are higher than .8 (The recommended threshold value is 0.7), indeed, the average variance extracted of each construct is greater than 0.5, inferring good reliability.

Almost fit indexes are considered Chi-Square= 1442.82, CMIN/DF 4.372 (>0.9), NFI = .937 (>0.9), TLI =.943 (>0.9), GFI=.912 (>0.9), AGFI =.888 (>0.9), RMSEA= .056 ( $\leq$ 0.08), and  $p=.000$  ( $<$ 0.05), which further reflects that the model is reasonably consistent with the data

**Model 1: Purposed Structural Relationships Among Factors of Financial Assistance on Customer's Purchase Decision When They Purchase any Automobile Vehicles**



Chi-square =1358.222, DF= 330, RMR=.060, RMSEA= .044, GFI=.918, AGFI=.896, PGFI=.721, NFI= .939, RFI=.929.

- F1- Building Independency (B\_I)
- F2- Supportive in every Aspect (Sup\_asp)
- F3-Decision Making Power (D\_M\_P)
- F4 – Wider Access (W\_A)
- F5- Security and safety from loss (S\_los)

**Effects Estimates for Factors and Variables of Financial Assistance Impacting on Customer's Purchase Decision in Automobile Loan**

Model 1 used for testing the proposed hypothesis, H01 that all extracted factors of financial assistance do not have significant loading on the model 1 and we rejected the H01. Further, the effect estimate of factors and their variables were identified for the impact of financial assistance on customer purchase decision in automobile industry which revealed that all factors of financial assistance have a direct significant effect on customer's purchase decision if they obtained an auto loan to purchase any automobile products. As result inferred that five factors have positive regression score Building

Independency (1.00), Support in every Aspect (.983), Decision Making Power (.944), Wider Access (.924) , and Security and safety from loss (.831) which indicated that all these five factors played an important role in determining the purchase decision of customer who seeks auto loan. Nevertheless, Chi-square =1358.222, DF= 330, RMR=.060, RMSEA= .044, GFI=.918, AGFI=.896, PGFI=.721, NFI= .939, RFI=.929, IFI=.953, TLI=.946, CFI=.953, Significance level=0.001, as symptoms of model fit. Hence, it can reveal that people seekers of automobile loan from various financial institutions give much priority to those offers wherein they probably feel supportive and satisfied. In fact, they correspond these offers to their every part of social life with overall satisfaction level after obtaining the financial

assistance from financial institutions. Indeed, the rate of interest slab, process fees, maximizes loan amount are key components which determine the recovery purpose (Archana. A.Mahajan, 2013, Joseph Chisara and Winnie Dlamini, 2013). Lifestyle, the disposable income of people and availability of financial institutions help the customer in mounting the social status and change the social status thereto (K. It is evident from the past research that financial institution must win the customer confidence through making more aware people about their services (M.E.Doddaraju Karafolod and Maciej Wozniak, 2014).Malar Math and C. Saras Wathi, 2013, Centenary Bank, 2013, Porkodi and D. Aravazhi, 2013).

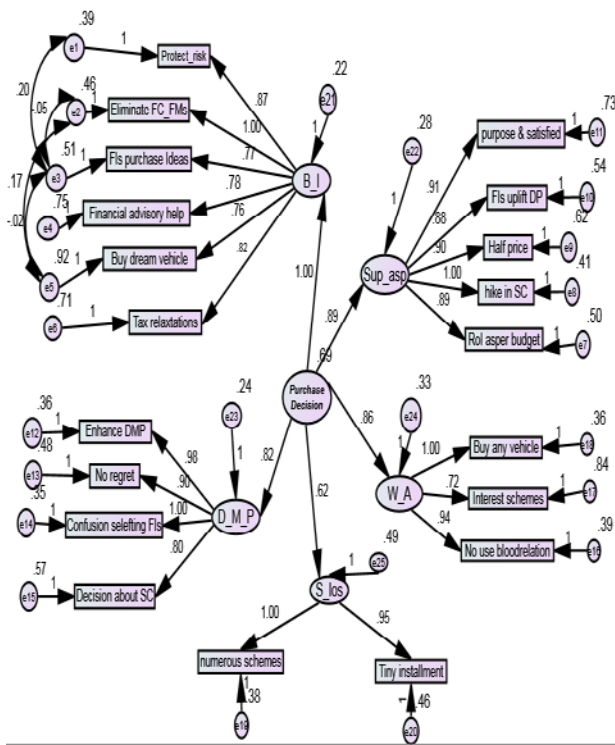
**Multiple Group Analysis**

This procedure is different from testing models with different specifications for the same sample

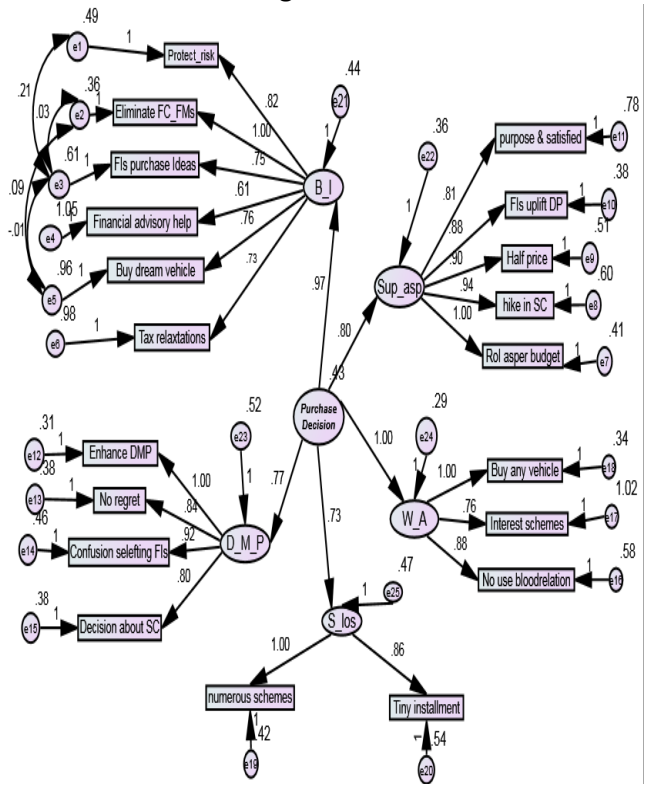
respondents, and here, we are comparing the same model across different samples of respondents ( Joesph.hair et al 2013).In order to analyze the difference and similarities between respondents of Punjab and Chandigarh province (in terms of factors affecting their purchase decision if they get financial help from financial institutions; Banks and Non-Banking financial companies), we systematically watched the interactions and the influence of the five constructs (Building Independency, Support in every Aspect, Decision Making Power, Wider Access, and Security and safety from loss) of purchase decision of automobile loan holders using Structure Equation Modeling Technique with the help IBM\_AMOS22.0 Version.

**A model factors of financial assistance affecting purchase decision auto loan customers of Punjab and Chandigarh**

**Punjab model 2**



**Chandigarh model 3**



Model 2 and Model 3 (Direct effect models), these two models examined the direct effect of financial assistance on customer`s purchase decision customers belongs to Punjab and Chandigarh. Therefore, both two model have significant goodness of fit values for model fit (Model 2=  $\chi^2 =$

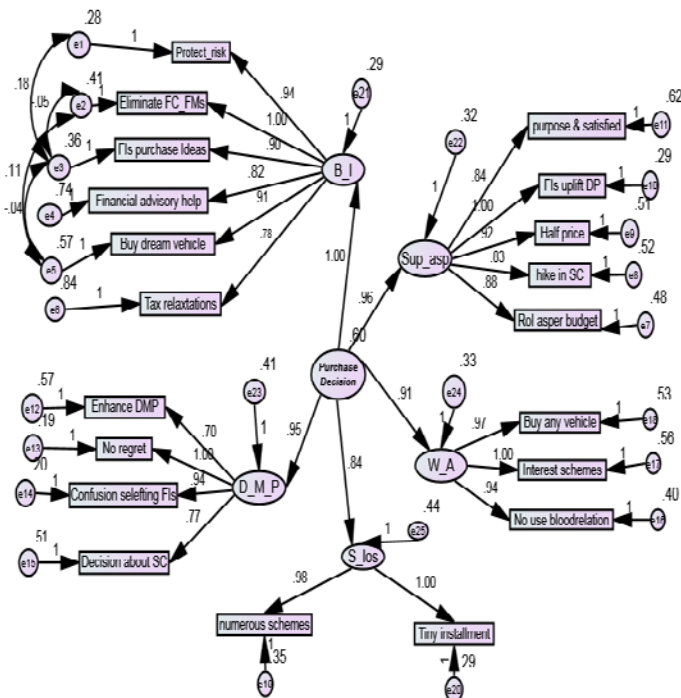
647.589,DF= 322,P=0.000, RMSEA=.036,RMR=0.05,GFI=.925,AGFI= .903, IFI= .958,CFI=.958; whereas Model 3 =  $\chi^2 =$  317.633,DF=161,P=0.000, RMSEA= .070,RMR= .071,GFI= .968,AGFI= .928, IFI= .912,CFI= .910). On the one hand, multiple group analysis of Punjab and

Chandigarh showed that auto loan customers from Punjab relying upon five crucial financial assistance factors, wherein, building independence is significant factor, support in every aspect is the second most worthy factor, followed by wider access to all financial services, and enhancement in financial decision-making power. On the other hand, auto loan customers from Chandigarh considered wider access to all financial services is indispensable for purchase decision which was total contrary customers of Punjab to their first preference. Similarly, differences increased for important factors of financial assistance as, Chandigarh customers labeled building independency is a second influential factor, and the third factor was supported in every aspect, followed by soaring in financial decision-making power. Although, customers from Punjab and Chandigarh are unlike each other in accordance with their agreement for important factors of financial assistance, they almost feel less effective in the case of support from the burden of loss as last important factor. Hence, the hypothesis HO1 is rejected at  $p < 0.05$ , as there was the positively significant effect of financial assistance extracted factors on purchase decision upon respondents of Punjab and Chandigarh differently.

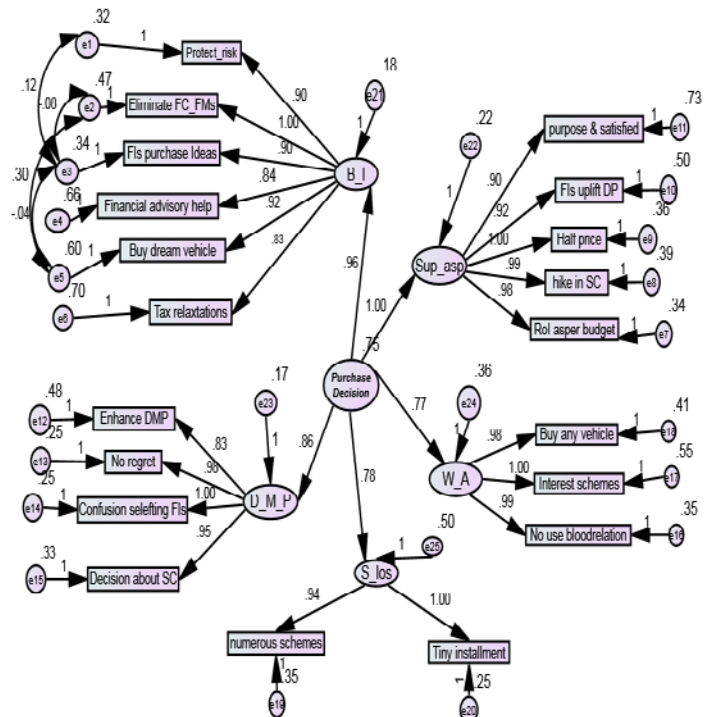
**Proposed models factors of financial assistance affecting customer's purchase decision: a special reference to geographically location (rural and urban area)**

Rural vs. Urban comparison was made by using multiple group analysis of the function of structure equation modeling, where we rejected the H02 because there was a significant effect of all five factors of financial assistance on customer's purchase decision in buying automobile products through auto loan facility. However, overall both model predicted that all extracted factors of financial assistance have strong relationship with the financial purchase decision of customers residing in rural as well as in urban area and the model fit indices was met fitness guidelines (Rural model-4  $\chi^2 = 375.482$ ,  $DF=161$ ,  $P=0.000$ ,  $RMSEA= .049$ ,  $RMR= .043$ ,  $GFI= .937$ ,  $AGFI= .918$ ,  $IFI= .969$ ,  $CFI= .969$ ; Urban model -5  $\chi^2 = 240.038$ ,  $DF=161$ ,  $P=0.000$ ,  $RMSEA= .045$ ,  $RMR= .044$ ,  $GFI= .912$ ,  $AGFI= .886$ ,  $IFI= .977$ ,  $CFI= .976$ ). Indeed, customers from both regions vary with their first priority to last towards financial assistance due to change in their lifestyle and social status as well.

**Rural model 4**



**Urban model 5**

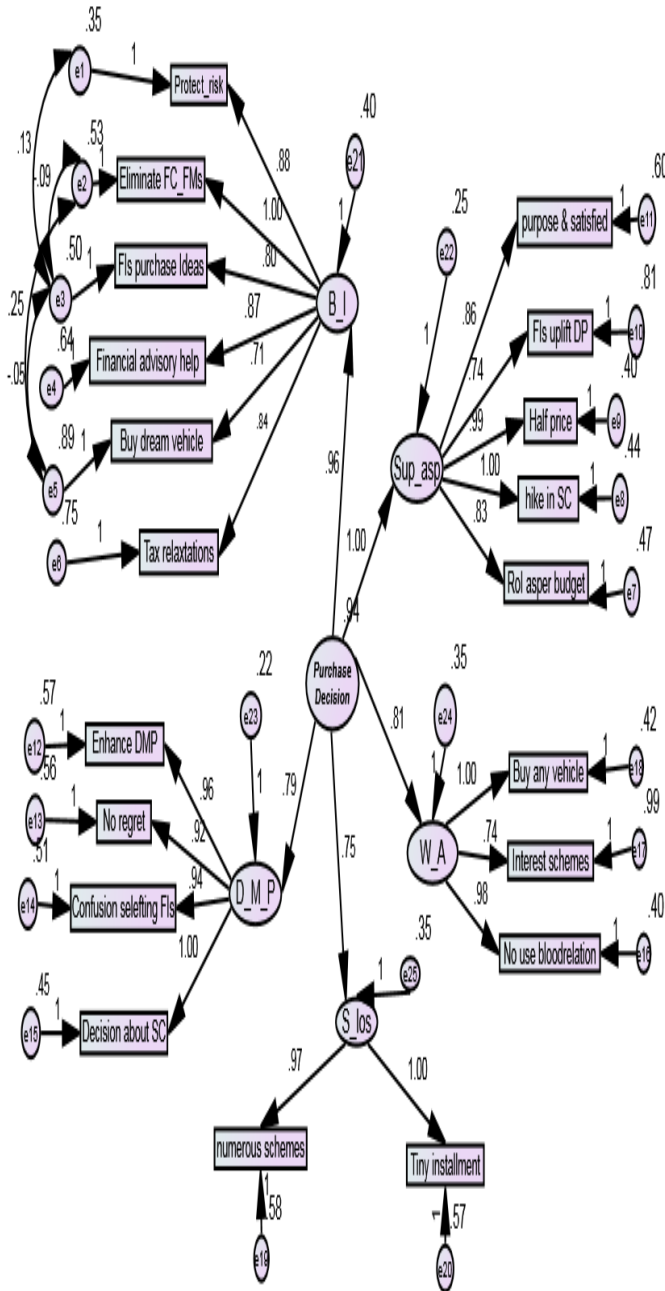


**Proposed models factors of financial assistance affecting customer's purchase decision: a special reference to gender (male vs. female)**

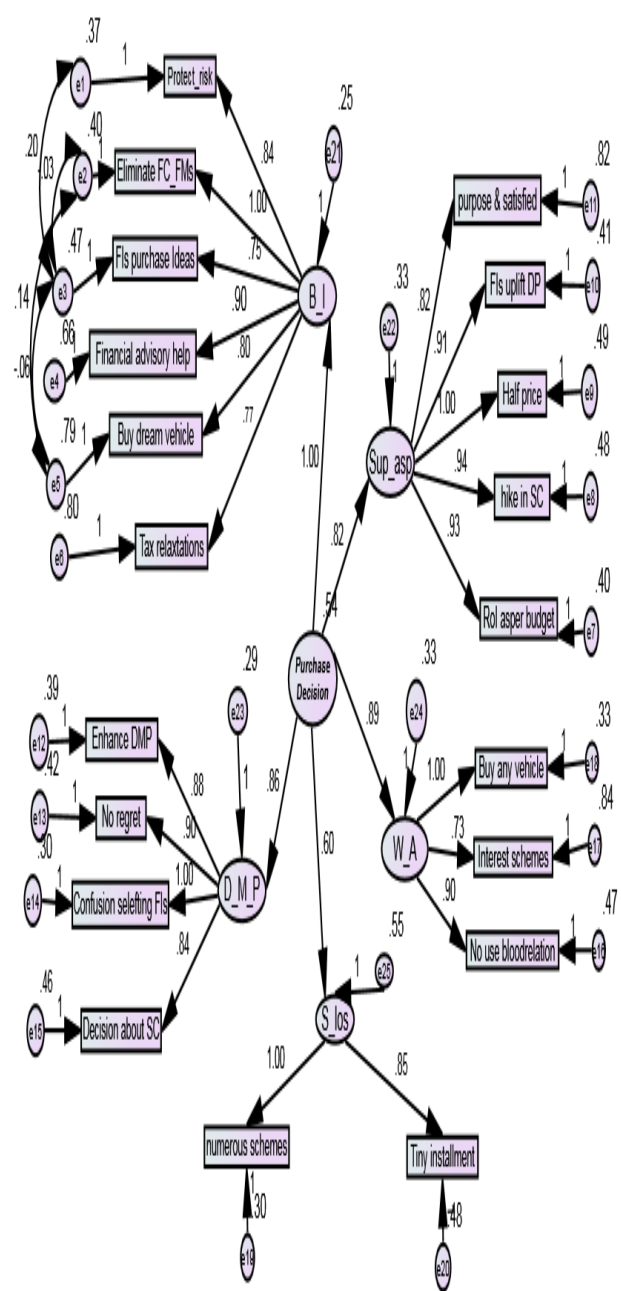
Male customers of auto loan and Female customer as well, both have significant relation with their purchase decision and factors of financial assistance for buying any automobile product. However, male and female customers also see the vital difference on the basis of their perceived value regarding five

factors of financial assistance. Therefore, H03 was not supported and the necessary stipulations for both models were as per the standard guidelines which make models fit ( Male model 6  $=\chi^2 = 389.213$ ,  $DF=161$ ,  $P=0.000$ ,  $RMSEA= .048$ ,  $RMR= .041$ ,  $GFI= .940$ ,  $AGFI= .922$ ,  $IFI= .961$ ,  $CFI= .961$ , and Female model 7  $=\chi^2 = 237.401$ ,  $DF=160$ ,  $P=0.000$ ,  $RMSEA= .050$ ,  $RMR= .049$ ,  $GFI= .940$ ,  $AGFI= .924$ ,  $IFI= .963$ ,  $CFI= .960$ ).

**Male model 6**



**Female model 7**

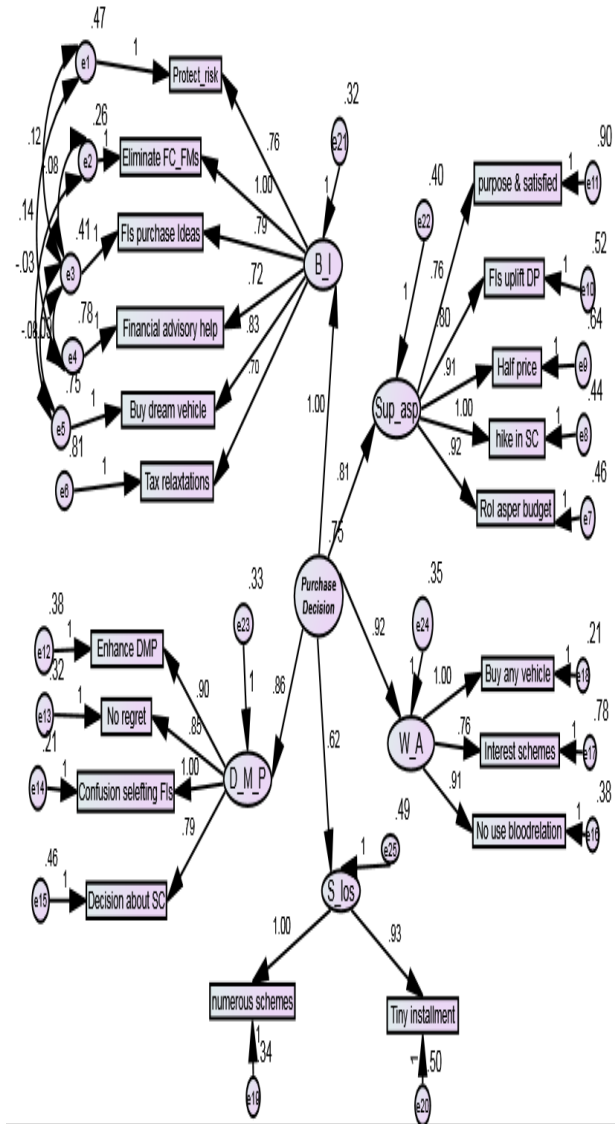


As far as the fitness of both models are concerned all values of both models meeting the guidelines which making the models fit (MALE  $\chi^2 = 389.213$ , DF=161,P=0.000, RMSEA= .048,RMR= .041,GFI= .940,AGFI= .922, IFI= .961,CFI= .961; FEMALE  $\chi^2 =$

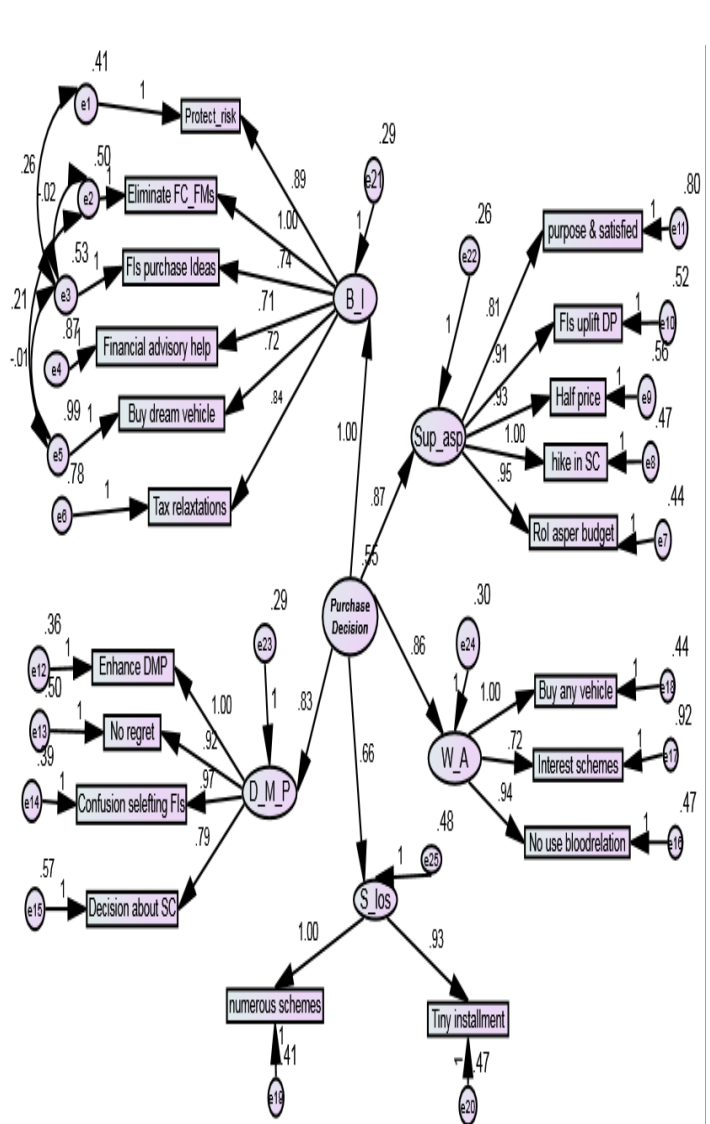
244.079, DF=161,P=0.000, RMSEA= .055,RMR= .054,GFI= .940,AGFI= .922, IFI= .961,CFI= .961)

**Proposed models factors of financial assistance affecting customer's purchase decision: special reference to nuclear family and joint family**

**Nuclear family model 8**



**Joint family model 9**



Model 8 and model 9 revealed that customers of auto loan from nuclear family and joint family having significant effect on their financial purchase decision due to financial assistance factors and these effects can be seen in both models wherein, building independency was common and most crucial factor for both type of family's members, thereafter, auto loan customers from nuclear family prefer wider access to financial services, whereas

auto loan customers considered support in every aspect, followed by wider access to financial services. It can be seen from the above models that all five factors directly affect the customer's financial purchase decision about buying any automobile product. However, all generated values for both models matched with guidelines for making model fit as NUCLEAR Model -8:  $\chi^2 = 308.415$ , DF=161,P=0.000, RMSEA= .042,RMR= .040,GFI= .946,AGFI= .929, IFI= .967,CFI= .967, and

Joint family's model hold the  $\chi^2 = 269.781, DF=159, P=0.000, RMSEA= .051, RMR= .050, GFI= .913, AGFI= .906, IFI= .963, CFI=.963$ . Thus, H05 is rejected.

### Discussion, Implications, and conclusions

The results indicate a direct and positive effect of all five factors of financial assistance on customer's financial purchase decision to get an auto loan for buying any of automobile products (moped, scooter, bike, three wheelers, and cars etc). H01, H02, H03, H04, and H05 all null hypotheses were accepted after a thorough analysis of observation and it was found that these findings contribute to the importance of financial services and their effect on financial purchase decision research stream. Therefore, some interesting findings have been extracted from the results are as below:

- In the multiple group analysis, firstly, it is identified that people belong to Punjab region have a significant impact of financial assistance on their purchase decision, whereas, maximum impact of *wider access* to financial services by people belongs to Chandigarh territory, which is quite opposite to Punjab people.
- Secondly, the path analysis conducted using SEM technique revealed that the maximum impact of becoming more independent after using auto loan facility by rural customers, but, urban people demand such facilities from financial institutions through effective financial services under the category of auto loan, eventually, it will encourage them to move for financial assistance from financial institutions.
- On the other hand, the category of male, results through path analysis, it is clear that male respondents want more independency if financial institutions provide all types of financial services under the auto loan category; thus, male respondents given preference to buying any auto vehicle through financial help. In addition, Female customers also give priority to become more independent before and after getting the financial assistance. Because both types of customers have direct impact from factor *building independency* under their purchase decision criteria.
- It is evident under the facts and figures explained above those respondents either male or

female and they further represent either nuclear family or joint family, all have a significant impact on their purchase decision from factor *building independency*. Therefore, it was the demand from both types of respondents from all financial institutions that they must provide numerous financial services under auto loan category, which make them more independent after they use it. More precisely, they do not want any financial help from their family members, friends, and from colleagues, if they already chose any financial institutions for financial help.

### Conclusion

The customers of Punjab and Chandigarh provinces paid much intention upon the five factors of financial assistance; *building independency, support in every aspect, decision-making power, wider access, and security & safety from loss*, have maximum positive impact on their purchase decision about buying any auto vehicle through financial assistance accessing financial institutions. All the five factors of financial assistance virtually influence the customer's purchase intentions if they do check out for financial institutions on the basis of extracted factors.

### BIBLIOGRAPHY

1. Agwu and m. Edwin (2014), "mobile phone banking in nigeria: benefits, problems, and prospects" *international journal of business and commerce*, vol. 3, no.6: feb 2014, issn: 2225-2436, pp: 50-70.
2. Ajala oladayo ayorinde et al (2013), "post-merger performance of selected nigerian deposit money banks-an econometric perspective" *international journal of management sciences and business research*, 2013, issn (2226-8235) vol-2, issue 8, pp: 49-59.
3. Archana a. Mahajan (2013), "a comparative study of disbursement of housing loan of public private and co-operative banks in sangli-miraj-kupwad- corporation area" *online international interdisciplinary research journal*, {bi-monthly}, issn2249-9598, volume-iii, issue-i, jan-feb 2013, pp: 141-147.
4. Ari hyytinen and tuomas takalo, (2008), "consumer awareness and the use of payment media: evidence from young finnish consumers"

- isbn 978-952-462-418-3, print; isbn 978-952-462-419-0, online, pp: 3-31.
5. B. Srinivasu and p. Srinivasa rao 2013, "infrastructure development and economic growth: prospects and perspective" *journal of business management & social sciences research (jbm&ssr)*, issn no: 2319-5614 volume 2, no.1, january 2013, pp:81-83
  6. Bertrand, m. And morse, a. (2011), "information disclosure, cognitive biases, and payday borrowing", *the journal of finance*, pp:1865-1893.
  7. Boyd, w., leonard, m. And white, c. (1994), "customer preferences for financial services: an analysis", *international journal of bank marketing*, vol. 12 no. 1, pp: 9-15.
  8. Centenary bank (2013), "interest rates and loan portfolio performance in commercial banks. A case study of centenary bank, entebbe road branch uganda", lahti university of applied sciences master's programme in international business management.
  9. Centenary bank archana a. Mahajan (2013), "a comparative study of disbursement of housing loan of public private and co-operative banks in sangli-miraj-kupwad- corporation area" *online international interdisciplinary research journal*, {bi-monthly}, issn2249-9598, volume-iii, issue-i, jan-feb 2013, pp: 141-147.
  10. Christos c. Frangos et al (2012), "factors affecting customers' decision for taking out bank loans: a case of greek customers" *ibima publishing journal of marketing research & case studies* <http://www.ibimapublishing.com/journals/jmracs/jmracs.html> vol. 2012 (2012), article id 927167, 16 pp: doi: 10.5171/2012.927167.
  11. Erol, c., kaynak, e. And el-b dour radi (1990), "conventional and islamic banks: patronage behaviour of jordanian customers", *international journal of bank marketing*, vol.8 no.4, pp: 25-35.
  12. Hafeezur and saima (2008), "an empirical analysis of the determinants of bank selection in pakistan: a customer review", *pakistan economic and social review*, vol.46, no. 2, pp: 147-155.
  13. Hans degryse and patrick van cayseele(1999), "relationship lending within a bank-based system: evidence from european small business data" *journal of financial intermediation*, 90-109 (2000), pp: 90 -109
  14. Haron, s., ahmed, n. And planisek, s. (1994), "bank patronage factors of muslim and non-muslim customers", *international journal of bank marketing*, vol.12 no.1, pp : 32-40.
  15. Holstius, k., and kaynak, e. (1995), "retail banking in nordic countries: the case of finland", *international journal of bank marketing*, vol. 13 no. 8, pp: 33-49.
  16. Javalgi, r.g., armaco, r.l. And hoseini, j.c. (1989), "using the analytical hierarchy process for bank management: analysis of consumer selection decisions", *journal of business research*, vol.19, pp:33-49.
  17. Joseph chisasa and winnie dlamini (2013), "an empirical analysis of the interest rate – vehicle purchase decision nexus in south africa" *international business & economics research journal* – may 2013 volume 12, number 5,pp:477-488.
  18. Kazeh, k., and decker, w. (1993), "how customers choose banks", *journal of retail banking*, vol. Xiv no. 4, winter,pp: 92-3.
  19. Kewal kumar (2013), "role of commercial banks in socio-economic development of scs and sts (a study with special reference to tahdco schemes in tamil nadu)" *indian journal of applied research*, volume: 4 | issue: 3 | mar 2014 | issn - 2249-555x, pp: 90-91.
  20. M.e. Doddaraju (2013), "a study on customer satisfaction towards public and private sector banking services with special reference to anantapur district of andhra pradesh" *global journal of management and business studies*. Issn 2248-9878 volume 3, number 6 (2013),pp: 651-658.
  21. M.e. Doddaraju (2013), "a study on customer satisfaction towards public and private sector banking services with special reference to anantapur district of andhra pradesh" *global journal of management and business studies*. Issn 2248-9878 volume 3, number 6 (2013),pp: 651-658.
  22. P. Venugopal (2013), "customers' perception on electronic banking: a study on tirupati area of andhra pradesh, india" *ijmss* vol.01 issue-06, (november 2013) issn: 2321-1784, pp: 62-78.
  23. Peppers, don and martha rogers, 2004. *Managing customer relationships: a strategic*

- framework, new jersey: john wiley & sons, inc, isbn: 978-0-471-: pp65641-8,560 april 2004
24. Porkodi et al (2013), "role of micro finance and self help groups in financial inclusion" *international journal of marketing, financial services & management research*, april. 2013. Issn 2277-3622, pp: 137-149.
  25. Riggall, j. (1980), "a new study: how newcomer select banks", *aba journal*, july, pp: 93-4
  26. S thakur and j k sing (2013), "prediction of online vehicle insurance system using bayes classifier: a proposed approach" *international journal of computer applications*, 49(16, july 2012), pp:38-42
  27. Samuel et al (2012), "risk factors of loan default payment in ghana: a case study of akuapem rural bank" *international journal of academic research in accounting, finance*, 2012, vol. 2 issue 4, pp: 376-382
  28. Sanjay kanti das (2012), "customer relationship management in banking: a comparative study of sbi and other nationalized commercial banks in india" *a journal of economics and management*, vol.1 issue 6, september 2012, issn 2278-0629, pp: 68-81
  29. Sarika.r. Lohana (2014), "myths & facts of emi & eai" *asian journal of management sciences*, 02 (03 (special issue)); 2014, issn: 2348-0351, pp: 103-107
  30. Schesinger, w. D., f. Unsal and m. R. Zaman (1987), "attributes of sound banking as perceived by a small business: results of a survey." *Journal of small business management*, vol.14 (october), pp: 47-53
  31. Seema u. Purohit et al (2012), "credit evaluation model of loan proposals for indian banks" *international journal of modeling and optimization*, vol. 2, no. 4, august 2012,pp:529-534
  32. Sooloo,k.(2006). Academia retrieved april 21, 2016, from [https://www.academia.edu/421572/apprasing\\_the\\_role\\_of\\_financial\\_institutions\\_in\\_the\\_economic\\_development\\_of\\_nigeria](https://www.academia.edu/421572/apprasing_the_role_of_financial_institutions_in_the_economic_development_of_nigeria).
  33. Sonu garg and parul agarwal (2013), "financial inclusion in india – a review of initiatives and achievements" *iosr journal of business and management (iosr-jbm)* e-issn: 2278-487x, p-issn: 2319-7668. Volume 16, issue 6. V. I (jun. 2014), pp: 52-61 [www.iosrjournals.org](http://www.iosrjournals.org)
  34. Souresh bhattacharya, d. D. (2014). Supply chain management in indian. *International journal of managing value and supply chains (ijmvsc) vol.5, no. 2* , 49-62.
  35. Srivastava rajesh kumar, (2007), "customer`s perception on usage of internet banking" *innovative marketing*, volume 3, issue 4, 2007, pp:67-73
  36. Tejinderpal singh, (2011), "redressal of customers` grievances in banks: a study of bank ombudsman`s performance in india" *international journal of research in commerce & management*, volume no: 2 (2011), issue no. 6 (june), issn 0976-2183, pp: 84-90
  37. Vikram shende (2014), "analysis of research in consumer behavior of automobile passenger car customer" *international journal of scientific and research publications*, volume 4, issue 2, february 2014 1 issn 2250-3153, pp: 1- 8
  38. Vikram shende (2014), "analysis of research in consumer behavior of automobile passenger car customer" *international journal of scientific and research publications*, volume 4, issue 2, february 2014 1 issn 2250-3153, pp: 1- 8
  39. Vinayagamoorthy and m. Somasundaram (2013), "a study on personal loan in india" *global research analysis*, volume: 2, issue: 5 may 2013, issn no 2277 – 8160, pp: 17-18
  40. Vinod k. Agarwal(1999) , "negotiation of specific clauses of loan agreements" a unitar sub-regional workshop on the legal aspects of debt negotiations for the government of vietnam (hanoi, vietnam 18 to 21 october 1999) series no. 10: negotiation of specific clauses of loan agreements visit [www.unitar.org/dfm](http://www.unitar.org/dfm) for other titles of our document series, copyright © 2000 united nations institute for training and research (unitar),a document no. 10, pp: 1-33
  41. Zineldin, m. (1996), "bank strategic positioning and some determinants of bank selection", *international journal of bank marketing*, vol.14 (6), pp: 12-22
  42. Zineldin, m. (1996), "bank strategic positioning and some determinants of bank selection", *international journal of bank marketing*, vol.14 (6), pp: 12-22