

# Customer Trust and Risk Characteristics of Housing Loan Market in Tamilnadu

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**Abstract:** Amid the present financial cataclysm, trust is the new buzzword in print media like newspapers and in the articulation of political leaders and experts whose expertise lies in finance. This implies that trust has huge significance in economy and subsequently in finance and money. Gritten also asserts that a metamorphosis in consumer trust has mushroomed globally as a consequence of financial crisis. The cataclysm or in other words, the crisis has helped gain a better understanding of the dominance of trust in banks. Not just banks but also other financial institutions. This paper's objective is to scrutinize the consumer trust content in banking sectors in terms of housing loan mortgage policies. Housing loan finance is simply the money that is put into building and maintaining the nations. This study has identified the relationship between the customer trust and the housing loan risk factors which have been further framed to make a panel data analysis so that the presicion of defaulters' would be possible.

**Key terms:** housing loan risks, customer test, panel data.

## INTRODUCTION

Amid the present financial cataclysm, trust is the new buzzword in print media like newspapers and in the articulation of political leaders and experts whose expertise lies in finance. This implies that trust has huge significance in economy and subsequently in finance and money. Gritten also asserts that a metamorphosis in consumer trust has mushroomed globally as a consequence of financial crisis. The cataclysm or in other words, the crisis has helped gain a better understanding of the dominance of trust in banks. Not just banks but also other financial institutions.

This paper's objective is to scrutinize the consumer trust content in banking sectors in terms of housing loan mortgage policies. Housing loan finance is simply the money that is put into building and maintaining the nations housing stocks. It is form of money that should be paid in various forms like rent, mortgage loans and repayments.

Tamilnadu being a country with a large number of youngsters who are working, the need for own houses for various reasons, status, self-identity or even the basic need for a house is pushing. Regardless of fulfilling the basic housing needs of various classes of people it is important for banks to carefully evaluate, analyse and anticipate the underlying risk of default. Housing finance companies and banks may lose their profitability if aggressive lending is done.

The unsteady and unequal distribution of household income may result in default. When the growth of household income is not proportionate. Eventually, This study aims at understanding the risk characteristics of housing loan associated with the customer trust and forecasting the housing loan risks by the prediction of customer trust factor.

### Purpose of the Study

The purpose of the paper is many folds. The purpose is to identify which type of households in the population are more prone to default in repayments. The fourth purpose is to try to investigate. The data in two forms are pooled with a cross section data. In order to identify the relationship between customer trust and the risk characteristics of housing loan.

## REVIEW OF LITERATURE

Fascination for studies surrounding consumer trust has accelerated only in the recent past although trust is a pabulum for all businesses or other relations with special regard to financial markets. To be more accurate, Jarvinen(1998) has reasoned that trust is of prime importance in all relationships (of long term) with financial sector being the rock-bottom(irrespective of the nature). Berry(1995) advocates that trust is the backbone of relationships whereas Ganesan (1994) views trust as a requisite for long term inclination in relationships.

Yeung and Yee (2010) condenses that nearly all factual cramming on trust focuses on B to B relationships, e.g., Peterson and Sullivan (1982). Marketing channels are also an epitome of literature concerning trust. However, B to C relationships do not pay much heed to the idea of trust. Despite all this, studies show the obligation for a refined comprehension of the term "consumer trust" ; since it is in contrast to the term "trust" in organisations. Wilkinson and Young's (1989) study, for instance, affirms that relationships that are personal in nature are seldom mentioned parallel to trust in relationships within the firms. The seriousness of the topic is more pronounced because of what Yeung and Yee (2010) has found. They discovered that consumer trust and the likelihood of purchase are directly proportional.

Trust is a certitude in the affairs of financial services and banking. For instance, in studies namely :Sunikka et al. (2010), dos Santos and Fernandes (2008), Dimitriadis and Kyrezis (2008), Coulter and Coulter (2003), dos Santos and Basso (2012), Kantsberger and Kunz (2010) and Shim et al. (2013). Among these, Coulter and Coulter (2003) emphasizes on trust in B2B relations and Dimitriadis and Kyrezis (2008) on tech-savvy channels. Kunz and Kantsberger (2010) proposed a conceptual mannerism of consumer trust with respect to risks. Shim et al. (2013) discovered well-being that was reported by self that had a profound influence on the measure of trust of consumers in banks. Macintosh's (2009) perusal was on precursors of trust. Fernandes and dos Santos (2008) and Basso and dos Santos (2012) interlinked precursors and after effects of consumer trust to grievances and their redressals. Lastly, Sunikka et al. (2010) presented that consumer capability and consumer trust are inversely propotional.

Trust interlinked to consumer e-banking has minted interest as an area of research in itself. Chen and Zhu 2012; Zhao et al.; Yap et al. 2010; Munoz-Leiva et al. 2010; Liebana - Cabanillas et al. 2013; Kumra and Mittal ,2004; Kivijarvi et al., 2007 ; Hoehle et al. 2012, Kesharwani and Bisht, 2012; Chu et al. ,2012. However, this source of research bases its focus on trust in par with electronic channels and receipt of e-banking but fails to study trust in its generic terms in banks let alone banking services. Similarly, m-banking studies trust formulated in mobile environment.

The above uncovering points out the need to gain insights about the build-up of consumer trust and to research factually how it unfolds in varied markets. Despite this, the knowledge as regards these issues is limited. For example, Shim et al. (2013) debates that the consumer trust in financial institution likes banks is very cornered.

Backing the above, this study is with regard to consumer trust in the context of financial service. As of now, the compositions on trust has failed to distinguish between trust in banking services of varied nature and trust in, say, banks which is the fundamental base of this paper.

The study proposed by Kyrezis and Dimitriadis (2008) earns trust in the channels of banks separately with trust in banks and findings of them allow research to continue in the subfields of operations of banks.

First hand research on trust are habitually done in one country. However, there are certain cross-country explorations, say, Kivijarvi et al. (2007),who juxtapose Portuguese and Finnish e-banking users ; Dennis and Alsajjan (2010) focus on accepting e-banking in the United Kingdom and K. S. A. and Chong et al. (2012) take care of m-banking in Malaysia and China.

At the EU level Walti (2012) research the After-effects of the financial cataclysm on citizens trust in ECB and his conclusions suggest that trust in European Central Bank has significantly reduced in those countries that have undergone enlargement in the yields of sovereign bonds and market (financial) turbulence. As of now, no studies extend its studies of consumer trust in the banking services and banks owned by them in all European Union countries of which they are the members.

The sharp fall in the property prices following the Asian financial crisis (June 1997- December 1998) led to a large number of residential mortgage holders in Hong Kong, South Korea, Japan and other places to experience negative equity which also led to a rapid increase in the non- performing assets (NPA's) and severe loan losses too.

Ellis (2008) had identified that the US mortgage system had tended to lend more conservatively previously, however at a much later phase, loan to value ratio (LTV) on new mortgages had substantially increased and an explicit 100 percent financing was in commonly existing (Tsatsaronis and Zhu, 2004).

### Methodology and Empirical Data Analysis

This study has been initiated with a view to understand the customer trust and its role on risk characteristics of housing loan. A panel data is framed by the researcher. The cross sectional data of customer trust have been collected through questionnaire which consists of five factors namely Customer Experience, Bank Service, Geographic Differences, Bank Performance, CRM. The time series data of housing loan data from two banks is taken for the purpose of predicting effects of customer trust on housing loan risks.

## RESULT AND DISCUSSIONS

Table 1: Pooled regression model

Dependent Variable: Housing Loan

Method: Panel Least Squares

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.068266	3.513607	-0.019429	0.9846
CUSTOMER EXPERIENCE	3.918379	3.326913	1.177782	0.2431
BANK SERVICE	-0.000994	0.001348	-0.737573	0.4634
GEOGRAPHIC DIFFERENCES	-0.082299	0.168052	-0.489723	0.6260
BANK PERFORMANCE	-17.31243	7.952115	-2.177085	0.0331
CRM	0.094055	0.027089	3.472108	0.0009
R-squared	0.267679	Mean dependent var	4.622496	
Adjusted R-squared	0.212201	S.D. dependent var	2.650368	
S.E. of regression	2.352415	Akaike info criterion	4.628417	
Sum squared resid	365.2345	Schwarz criterion	4.818140	
Log likelihood	-160.6230	Hannan-Quinn criter.	4.703946	
F-statistic	4.824891	Durbin-Watson stat	2.302876	
Prob(F-statistic)	0.000806			

The above table describes that all 9 housing loan schemes having same effects from customer trust on housing loan risk. Since it is statistically not admissible, The researcher has to run next model of Fixed and Random Model. A Hausman Test is undertaken in order to determine the right effect analyse.

**Ho – Random effect regression model is appropriate.**

**H1 – Fixed effect regression model is appropriate.**

Table 2: Correlated Random Effects - Hausman Test

Equation: Untitled

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	8.654430	5	0.1237

\*\* WARNING: estimated cross-section random effects variance is zero.

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
CUSTOMER EXPERIENCE	0.536919	3.918379	1.785153	0.0114
BANK SERVICE	-0.001213	-0.000994	0.000002	0.8647
GEOGRAPHIC DIFFERENCES	-0.360860	-0.082299	0.017410	0.0348
BANK PERFORMANCE	-9.364936	-17.312427	26.3472010	0.1215
CRM	-0.042417	0.094055	0.037839	0.4829

Cross-section random effects test equation:

Dependent Variable: RISK OF HOUSING LOAN

Method: Panel Least Squares

Date: 01/09/19 Time: 01:10

Sample: 2010 2017

Periods included: 8

Cross-sections included: 9

Total panel (balanced) observations: 72

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	11.31468	10.56219	1.071244	0.2885
CUSTOMER EXPERIENCE	0.536919	3.532507	0.151994	0.8797
BANK SERVICE	-0.001213	0.001845	-0.657576	0.5134
GEOGRAPHIC DIFFERENCES	-0.360860	0.211412	-1.706907	0.0932
BANK PERFORMANCE	-9.364936	9.351013	-1.001489	0.3208
CRM	-0.042417	0.196336	-0.216044	0.8297

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.378243	Mean dependent var	4.622496
Adjusted R-squared	0.238884	S.D. dependent var	2.650368
S.E. of regression	2.312232	Akaike info criterion	4.686970
Sum squared resid	310.0923	Schwarz criterion	5.129655
Log likelihood	-154.7309	Hannan-Quinn criter.	4.863204
F-statistic	2.714162	Durbin-Watson stat	2.471226
Prob(F-statistic)	0.004677		

The above table shows the non-significant relationship among the variables and the regression weight therefore, Null hypothesis (**Random effect regression model is appropriate**) is not rejected. Hence, Random effect regression is appropriate.

Table 3: Random Effect Model

Dependent Variable: RISK OF HOUSING LOAN					
Method: Panel EGLS (Cross-section random effects)					
Variable	Coefficient	Std. Error	t-Statistic	Prob.	
C	-0.068266	3.453590	-0.019767	0.9843	
CUSTOMER EXPERIENCE	3.918379	3.270084	1.198250	0.2351	
BANK SERVICE	-0.000994	0.001325	-0.750391	0.4557	
GEOGRAPHIC DIFFERENCES	-0.082299	0.165181	-0.498234	0.6200	
BANK PERFORMANCE	-17.31243	7.816281	-2.214919	0.0302	
CRM	0.094055	0.026626	3.532448	0.0008	
Effects Specification					
			S.D.	Rho	
Cross-section random			0.000000	0.0000	
Idiosyncratic random			2.312232	1.0000	
Weighted Statistics					
R-squared	0.267679	Mean dependent var	4.622496		
Adjusted R-squared	0.212201	S.D. dependent var	2.650368		
S.E. of regression	2.352415	Sum squared resid	365.2345		
F-statistic	4.824891	Durbin-Watson stat	2.302876		
Prob(F-statistic)	0.000806				
Unweight Statistics					
R-squared	0.267679	Mean dependent var	4.622496		
Sum squared resid	365.2345	Durbin-Watson stat	2.302876		

Through the Hausman Test, it is determined to employ the housing loan data for random effect model analysis.

The random effect model which is in par with the customer trust which is measured with the five constructs.

The random effect model in Table 3, The performance of bank( $\beta$ :-17.312, SE: 7.8162,T:-2.214,P<.030) and CRM( $\beta$ :.0940,SE:0.026,T:3.53,.0008) are the factors which is statistically significant that direct that the housing loan risk is statistically associated with the performance and CRM level of the banks. The random effect model denotes that the customer trust does not fully influence the housing loan risk. Whereas, The periodical changes in the customer trust that is randomly checked with the comparison of housing loan risk status.

The banks are recommended by the researcher to monitor the customers continuously in spite of initial verification.

As per the t statistic of two years housing loan defaulters risk characteristics. It is understood that there is a correlation between the customer trust and housing loan defaulters.

### CONCLUSION

This study has identified the relationship between the customer trust and the housing loan risk factors which have been further framed to make a panel data analysis so that the prediction of defaulters' would be possible.

The relevant literature on housing demand estimation and all the key risk factors which is collected from various secondary sources with literature on housing demand estimation and key risk factors embedded in this market and nature of their relationship. The section following that gives a wide-angle macro perspective on the housing market condition in Tamilnadu that will enable the reader too assess the market and industry attractiveness.

The data, construction of variables and descriptive statistics.

The empirical methodology and result and analyses the risk of housing demand and risk in residential housing segment in Tamilnadu and discusses the key findings and their relevance with the cross sectional study with customer trust.

Eventually, the study recommends that the initial miniaturisation is not sufficient for preventing housing loan defaulters. Besides, continuous monitoring would foster the practice of housing loan with no defaulters.

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