Abstract:

This chapter includes:

- Goals of the study
- Population, sample frame and sampling technique
- Tools of analysis
- Summary of results
- Practical significance and managerial implications
- Scope of future research

The study attempts to understand the impact of retailing and the credit card environment on materialism, compulsive buying, credit card usage pattern and credit default among shoppers in Kochi Municipal Corporation.

The goals of the study are to understand the extent of materialism and compulsive buying among shoppers in Kochi Municipal Corporation. The study further attempts to understand whether the presence of credit cards has in any way changed the pattern of spending (usage) and also refine the understanding of what influences (causes) credit card usage pattern. The final accomplishment of the study is to find the extent of influence of the above said variables on credit default.

Type of study-The study is descriptive and cross-sectional in nature using the survey design.

Population -There are around 0.35 million credit card users in Kochi Municipal Corporation, Kerala (Total of 1.5 million people). These cards are offered by 28 different national and international banks together having 199 different types of product offerings.
Sample Frame and Sampling Technique - A quota sample of 550 respondents is selected from among those who are using the credit cards for a period greater than one year. This method is identified by the researcher as a credible way of tracking credit card spending and financing patterns as the respondents have completed a few billing cycles in the said period. Prior to this a pilot study was conducted among 200 credit card users to determine their responses and to validate the questionnaire. The number of final respondents from whom data collection was done is 550. The quota sampling is a non-probability sampling technique which can involve the judgement of the researcher as well to ensure quality of the responses.

Tools of Analysis- A combination of descriptive (mean, standard deviation, distribution tests), and inferential (t-test, Factor Analysis, Discriminant Analysis (DA) and Structural Equation Modeling (SEM) analysis is undertaken.

Time Frame-The pilot study was undertaken from January 2007 to March 2008. The respondents of the final field study were administered with the questionnaire from April 2008 to April 2010.

Results of Discriminant Analysis (DA)

The maximum difference between the group mean scores is for the variable, compulsive buying (1.10) and the minimum difference is for the variable, materialism (0.59). The difference between the group means, for all the predictor variables, is greater than 0.5, when the distances are calculated from the non-defaulters to defaulters, which is good (table 33 and 35). The structure matrix is of any value in interpretation of categories only if its value is greater than 0.30. Using the structure matrix the predictor variables strongly associated with discriminant function potential.
defaulters (early warning stage), which helped to distinguish potential defaulters (early warning stage) from non-defaulters are compulsive buying (0.93), credit card financing behaviour (0.74) and enhanced credit card spending (0.40)(table 37). Based on the structure matrix the predictor variable strongly associated with discriminant function defaulters which is used to distinguish defaulters from potential defaulters (early warning stage) is enhanced credit card spending (0.78) (table 37). The three predictor variables selected in the model as seen in the structure matrix (both to categorise potential defaulters (early warning stage) from non-defaulters and defaulters from potential defaulters (early warning stage), has differences between group mean scores, greater than 0.90. The relative importance of Materialism (MAT) used in the categorisation of the dependent outcome, is not explicit, due to the insignificant differences between group mean scores (table 33 and 37). Hence, the overall perceived attitudes of respondents around Compulsive Buying (CBB), Credit Card Financing Behaviour (CCFB) and Enhanced Credit Card Spending (ECCS) are able to create the dependent outcome groups, potential defaulters (early warning stage) and credit defaulters. These factors together are responsible for a cross-validated classification rate which is at 51.8 percent for the categorical dependent outcome, credit default (table 34 & 38).

The standardized canonical discriminant function coefficient for Compulsive Buying (CBB) is 0.74 and for Credit Card Financing Behaviour (CCFB) is 0.41 to the dependent variable, potential defaulters (early warning stage). Enhanced Credit Card Spending has a coefficient of correlation of 0.97 with Credit Defaulters (table 36).

The prior probability of classification of the dependent outcome for three categories viz; non-defaulters, potential defaulters (early warning stage) and defaulters is 33 % which has been enhanced by over 25 % after using the four predictor variables
Compulsive Buying (CBB), Materialism (MAT), Enhanced Credit Card Spending (ECCS) and Credit Card Financing Behaviour (CCFB). The exact cross validated grouped cases correctly classified is 51.8% which is over 57% from the initial 33% indicating that discriminant analysis was a success.

The improvement in classification of non-defaulters is 79% that of potential defaulters (early warning stage) is 35% and that of defaulters is 211% from running the discriminant analysis (the basic requirement is only 25%) (table 3).

The exact classification rate of non-defaulters classified as non-defaulters is 59%. The non-defaulters classified as potential defaulters (early warning stage) is as high as 25%. The potential defaulters (early warning stage) correctly classified as potential defaulters (early warning stage) is 44.5% Nearly 55.5% can become defaulters or non-defaulters. 36.26% out of 364 potential defaulters (early warning stage) are on the non-defaulter side. The remaining 19.23% potential defaulters (early warning stage) are on the defaulter side. The classification of defaulters as defaulters is 70% 23.20% of defaulters are classified as potential defaulters (early warning stage) (table 34 and 38).

Results of Structural Equation Modeling (SEM):

The final model fit summary for SEM shows reasonable good values indicating sound theoretical grounding and data fit as well (table 39, 40 and 41). The regression weights of Materialism (MAT) on Compulsive Buying (CBB) and Enhanced Credit Card Spending (ECCS), that of Compulsive Buying on Credit Card Financing Behaviour (CCFB), Enhanced Credit Card Spends and Credit Default, along with Credit Card Financing Behaviour on Credit Default are all significant with the paths reporting critical ratio greater than 1.96 (p<.05) (table 39, 40, 41 and figure 14). The influence of Compulsive Buying (CBB) directly on Credit Default (CD) is 0.634. The influence of Compulsive
Buying on Credit Card Financing Behaviour is 0.636 and that of Credit Card Financing Behaviour on Credit Default is 0.42. This indicates that among Compulsive Buyers, Credit Card Financing Behaviour is definitely enhancing (mediating) the probability of Credit Default (H11b). The Sobel test is used to calculate the critical ratio as a test of whether the indirect effect of the independent variable on the dependent variable via the mediator is different from zero, which is found to be significant (t-statistic 4.3623, p<0.00001287) (Baron & Kenny, 1986). Enhanced Credit Card Spending (ECCS) is not leading to Credit Default (Reject H9) and the mediating role of ECCS in the relationship between Compulsive Buying and Credit Default is rejected (H11a). To ensure that there is no regression to the mean, one sample t-test for each of predictor variables shows that there is no significant difference between sample mean and population mean (p>.05).

Practical Significance and Managerial Implications

All variables affecting the dependent credit card default probability have an increasing influence (as indicated by rising mean scores) when moving along three categories viz credit non-defaulter, potential defaulters (early warning stage) and defaulter (table 33). But for most of the respondents the difference in the extent of influence is moderate. Very large influence within and between the three categories would be an indication of lack of self-regulation among credit card users. In that case many respondents would be high on compulsive buying and credit card financing behaviour. Such a situation needs deeper and focused attention as the social milieu could be more disturbing.

The increasing faith in the material success of life as perceived by consumers in India is definitely a positive sign for the marketers. The disturbing figure among credit card retailers is the default rate of 22.73 % (125) and what is even more disturbing is the
fact that 66.18 % (364) are on the potential defaulters (early warning stage) of default. The consolation is that compulsive buying as a predominant trait is observed only among 80 (14.54 %) of the total respondents. Of the total 125 defaulters, 98 (78.4 %) are directly accounted for by either high compulsive buying score (≥3) or high credit card financing behaviour (>3). For the remaining 27 of defaulters, all cases have credit card financing behaviour score greater than 2.6 when the average for the whole sample is 2.0. Thus for the respondents who have defaulted a cumulative 100 % percent cases are attributable to relatively high compulsive buying and high credit card financing behaviour. The default can happen due to other incidental factors like the unanticipated economic slowdown for the years under consideration (2008-10) which are not studied on a case to case basis.

The concern is whether a consumer is more likely to become compulsive buyer in the future and is it really going to further aggravate the credit default situation? With more and more credit cards being sold by financial retailers there is a high possibility that credit cards will become indispensable for a consumer. The first question to be raised is, what percentage of future consumers would have high enhanced credit card spends and high credit card financing behaviour from the present 58 % and 9.27 % respectively? The second question is, how many more rarely compulsive buyers will become compulsive buyers? The practical solution for the financial retailers is to device appropriate mechanisms to increase customer suitability in the retail sale of a product like the credit card.

There is a growing impetus to consider issues that leads to the potential mis-selling of credit cards and its services. Individuals of late are forced to take greater personal financial responsibility. Their reliance on the State and Employers is decreasing with
sweeping changes in banks due to the Basel Committee norms on banking supervision and also due to the general economic and market reforms. Relatively low nominal interest rates supported with high disposable income have been a factor contributing to rising levels of personal debt. Adding to this is the availability of increasingly easy to use financial products like the credit card. The complexity of financial products like the credit card may make the associated post-possession credit card usage risks less apparent to individual credit card users. This heightens the potential for unsuitable transactions (Alex & Raveendran, 2008).

Competition between financial retailers has increased manifold and thereby a substantial growth in cross-selling of credit cards is seen over the last many years. This has resulted in a single customer possessing many cards of different retailers, enhancing the possibility of misuse. Although the producer of a financial product like credit card, is not always its final sales agent, the producer's branding may remain associated with the product. In such cases, the producer may retain most of the reputation risk, and therefore has an interest in ensuring the proper selling of the product. This kind of cost is not always picked up in a firms' market and credit risk management models as it involves extensive judgement. This consequently enhances liquidity risks in the short term and solvency risks in the long term. There is also a risk of reputation contagion, as firms in one sector, or selling a particular product, are tainted by the actions of a similar firm. The legal risk for firms may also increase as the market becomes more litigious (Alex & Raveendran, 2008).

Scope of Future Research

The credit non-defaulters, potential defaulters (early warning stage) and defaulters in the present study are categorised based on their scores in the self-response form. A
more reliable method is to take a source list of credit card users from banks, categorised in actual as credit non-defaulters and defaulters. This is a possible way to increase cross-validation. Inspite of including card users of more than one year who are sufficiently exposed to the billing cycle, respondents can be defaulters due to factors which are incidental that could not be explained without supportive data obtained through cross examination of each respondent. A longitudinal study is an apt method to meaningfully account for changes in consumer attitudes and preferences to buying which is spread over wide time frames. The socio-cultural settings in India are slightly different from the west, an area to be emphasised and explored in future studies.

End note: 1. Credit Card Usage Pattern includes Enhanced Credit Card Spending and Credit Card Financing Behaviour.