

CREDIT CARDS AND CONSUMER BEHAVIOUR: A PRELIMINARY INVESTIGATION

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ABSTRACT

Since no study was undertaken in India to study the behavior of credit card holders and consumers, the researcher attempted at identifying the factors which influence the most, decision of owning a credit card. Since no secondary data was available, the researcher designed an questionnaire and administered to various types of bank customers in the cities of Ludhiana, and Jalandhar. The objective of this study was to understand the usage patterns of credit cards by the consumers. A major limitation of the study was a very small population size and a non-co-operating attitude and sometimes stark refusal by the credit card companies (issuers) to divulge the list of credit card holders in the cities of Ludhiana and Jalandhar. Another major limitation was non-availability of resources to undertake the survey. The researcher was left with a list of 1650 credit card holders, which, finally, constituted the universe for this study. The entire universe was divided into four strata; viz., The Businessmen, Senior Govt. Officials and Senior Non-Govt. Executives, Women, and Students. This indeed was a very small universe. The questionnaire was tested for its validity and reliability. The conclusion drawn from the study include; A significant number of the credit card holders use their credit cards to make retail purchases. The information regarding the credit cards was significantly ignored by the consumers at the time of owning a card. They found interest rates, fee & charges, and credit card terms and conditions such as repayment time, easy to compare amongst the loan products offered by credit card companies.

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CREDIT CARDS

The word credit comes from the Latin word *creditus* which means entrusted. Credit means that someone will lend you money and give you time to pay it back, usually with interest. Credit allows you to buy now and pay later.

The use of credit cards originated in the United States during the 1920s, when individual companies, such as hotel chains and oil companies, began issuing cards to customers for purchases made at those businesses. The use increased significantly after World War II. The first universal credit card which could be used at a variety of stores and businesses was introduced by Diner's Club Inc. in 1950. The first national bank plan was Bank America Card which was started on a state-wide basis in 1959 by the Bank of America in California. This was licensed in other states starting in 1966 and was renamed Visa in 1976. Other major bank cards followed, including Master Card formerly Master Charge

Credit Cards In India

Usage of credit cards by bank customers in India started since 1980s, but only in early 1990s, the market has witnessed a quantum jump. The total number of cards issued by banks and outstanding has increased from 2.69 crores in Dec., 2003 to 4.33 crores by the end of Dec., 2004. Likewise, the actual usage has registered increased both in terms of volume and value, i.e. from 14.57 crore transactions amounting to Rs.26,951 crores during 2002-03 to 18.55 crore transactions aggregating Rs. 35,870 crores during 2003-04. In the year 2004, up to December alone card customers undertook about 21.19 crore transactions amounting to Rs.44,737.73 crores¹.

How Does It Work

The credit card companies are referred to as "Networks". The banks that issue these cards are referred to as "Issuers". Discover Card and American Express are a different type of network. While Visa and Master Card are associated with hundreds of member banks, which issue their own unique version of these cards. The issuers charge cardholders, interest on their payments and cash transactions. Credit card companies charge stores a fee for each transaction through card sale. Master Card and Visa also make money by charging the banks that issue their cards as "Association Fee" i.e. a fee to be associated with them.

¹ "Credit Cards Industry- Use and abuse", Business World; July, 2007; pp54-59.

Credit card is a loan. If the amount borrowed on a credit card is paid in full each month, there is no additional cost for using credit card. However, if the borrower is unable or unwilling to pay the credit card bill in full, there is an interest or finance charge on the unpaid balance. Some time is given by the issuer to pay money back, this is grace period, before they start charging the interest. Eventually the customer has to pay the finance charge, if he doesn't pay it immediately, i.e. if he carries a balance. A pre-set percentage rate-called APR or annual percentage rate determine the charge to be paid.

APR - Annual percentage Rate: Annual percentage rate is the rate of interest charged by the issuers of credit cards at the expiry of grace period, when a cardholder fails to deposit the balance of a transaction in the networking bank during the grace period. In India, interest charges on credit cards range from 2.5% to 3% per month (in US it is 1% to 1.5%). This means an APR of 30% to 36%. APR is of several kinds:

Variable Rate: This rate varies based on the financial indices such as the prime rate offered by the Reserve Bank of India. It means the rate can go up and down every month.

Fixed rate: In this case the interest rate is independent of the economy or the big financial indices. Some issuers may change this rate but first give cardholder the option to cancel the card, or, if he makes a late payment, the rate may automatically increase.

Different APRs for different transactions: A cash advance is usually charged at a higher rate and the finance charge starts immediately. The logic is that the issuer considers it riskier to provide cash to the cardholder on the spot, so they charge for it.

Risk Pricing: If the card holder delays payments for a number of times, the rate charged will be higher. The logic is, poor payer is more likely to default on loan.

Most credit cards are used as open-ended credit accounts or charge accounts, originally designed for the short-run money needs of the consumers. These accounts have a credit limit and a flexible re-payment schedule. The cardholder, who pays the entire balance due within the grace period, avoids interest on financial charges. When a card is used responsibly, the cardholder can build a good credit history. Worldwide, more than 90 million Master cards, 41 million Discover cards and 142 million Visa cards are issued. Credit cards are issued by local and national businesses as well as banks. The credit card issuers must inform consumers before they sign up about:

1. Annual percentage rate (APR),
2. How monthly fees are calculated,

3. Cost of all fees such as membership, transaction, cash advance and others, and
4. Grace period.

A credit card is however, is a convenient, safe and a timely help in emergency. If the cardholder uses the card instead of paying cash, he is entitled to an interest free credit of around 50 days. The credit period is calculated as per the billing cycle to get a maximum credit of 50 days.

A survey has indicated that 40% of the credit card users in India carry forward dues on their cards. In such circumstances it is wiser to consider taking personal loan with lower interest rates than taking revolving credit on the credit card.

“Interchange plus” is simply the rate plus a margin that goes to the provider, without any complicated tiers and exceptions. “There’s more competition (among merchant account providers), so they are lowering their rates and interchange plus is becoming available to companies of all sizes”. When choosing a merchant account provider, one should ask detailed questions about fees they might charge. Another common fee is for terminating the contract.

Not all plastic cards are credit cards. The use of bank debit cards and smart cards is increasing. The debit card automatically deducts money from checking accounts. The smart card stores valuable information about the consumer on computer chips instead of magnetic strips. This allows business access to better information about the consumer so that they can provide personalized service. Some consumers are concerned about privacy issues associated with smart cards and credit cards knowing so much about them. Credit cards help consumers satisfy their wants and needs, but how does the credit card affect issuers of the cards and businesses that accept purchases made by credit cards? Purchases made by credit cards issued by banks charge merchant a transaction fee. This fee is a percentage of the price of any good or service purchased using the credit card. Credit card issuers charge interest on the unpaid balances not paid during the grace period and they may collect an annual fee from cardholders.

Prime lending rates haven't gone up following RBI's squeeze through CRR, but sub-PLR rates are being hiked by banks, and these include rates on credit cards. Indian card users pay some of the highest rates in the world. On average, card issuers charge around 36% interest annually, topped by other charges. So as banks raise credit card rates. Further, the question always relevant becomes sharper: Why do Indians pay close to 40% annually when Americans pay around 13%? American banks settled for this rate in the early years of this decade. No simple explanation suffices to rationalize the difference.

What about India's credit card industry? Does it have something peculiar that explains high interest rates? There are no detailed studies in the public domain on the profitability of credit card operations in India. But available evidence suggests costs of operations are high because rates of defaults are high. Apparently, one in every ten card holder in India defaults, while one in twenty-five does in the US. This does represent a significant cost and Indian credit card issuers have to factor this in while calculating rates. However, all this still doesn't fully explain the high rates. In 2005, RBI's working group on credit card business had reported that globally, credit cards were regulated not by central banks per se, but by consumer / fair trade regulators and laws. These institutions, unfortunately, are weak in India. The central bank did send out a guideline on credit card operations that resulted in higher levels of disclosures of transaction details to consumers. It also asked for rates to be rationalized. But RBI cannot and should not, and in this case, does not seem to want to fix credit card rates. Only more competition, better information system and lower defaults can bring rates down. That sounds like a long term solution.

RESEARCH METHODOLOGY

Since no study was conducted in India on this topic, the researcher decided to undertake this work for a preliminary investigation. For this purpose, cities of Ludhiana and Jalandhar were selected. Representative strata of population were selected from amongst the available lists of credit card holders provided by friendly bank managers of SBI, UTI bank, Oriental bank of Commerce, and HDFC bank branches situated in these cities. The total no. of credit card holders from these lists constituted 963 nos. from Ludhiana and 748 nos. from Jalandhar respectively. A close scrutiny of the list of addresses revealed that the card holders belonged to different sections of society. So they were categorized on the basis of demographic factor such as occupation. The logic behind the selection of this factor was that the credit card consumers should have a continuous source of regular income to pay bills which are raised when they do shopping and make payments using credit cards. The stratified random sampling technique was used to determine the size of sample. Since each stratum was more homogeneous than the total population, the researcher was able to get more precise estimates of each stratum by estimating more accurately each of the component parts, thus obtained a better estimate of the whole.

Each stratum was formed on the basis of common characteristics of the items to be put in each stratum. Simple random sampling technique was used for selection of items for samples from each stratum.

The method of proportional allocation method is usually followed under which the sizes of samples from different strata are kept proportional to the sizes of strata. That is if P_i represents the proportion of population included in stratum i and n represents the total sample size, the no. of elements selected from stratum i is $n \cdot P_i$. Thus using proportional allocation, the sample sizes for different strata are calculated. The researcher was left with a list of 1650 credit card holders, which, finally, constituted the universe for this study. The entire universe was divided into four strata; viz., The Businessmen, Senior Govt. Officials and Senior Non-Govt. Executives, Women, and Students.

The total sample size was decided upon every tenth entry into each stratum, thus amounting to $1/10$ of $1650 = 165 = n$

The no. of businessmen	843	$n_1 = 84$
No. of Senior Govt. and Non-Govt. Officials and Executives	407	$n_2 = 40$
No. of Women	250	$n_3 = 26$
No. of students	150	$n_4 = 15$

Since no secondary data was available, the primary data was collected using a questionnaire.

Question no. 1-7, were asked to study demographics of the respondents.

Rests of the questions (From Q. No. 8 to Q. no. 28) were asked to collect basic data about the possible usage behavior of the credit card holders.

Demographic Variables:

Gender: 68% of the responded were fond to be males and 32% were females

Age : 25% respondents were in the age group of 25-34 years, 38% were in the age group of 35-44 years, 27% were in the age group of 45-54 years, 8% were in the age group of 55-64 years and only 2% were in the age group of 65 years or more.

All the male respondents belonged to all the age groups; females were found to be belonging to the age groups of 25-34 years and 35-44 years age groups. 78% and 22% of females respectively were belonging to the above mentioned categories.

Educational Qualification: 40% of the males in the age group of 25-34 years and 35-44 years were found to be graduates. 25% were found to be post graduate, 30% were under-graduates and only 5% were doctorates. Among females, 45% were post graduate and 35% were graduates and the rest were either matriculate or under graduates. Males with post-graduate or doctorate degrees were found to belong to the age group of 45-54 years, and female graduates and post-graduates belonged to the age groups of 25-34 years and 35-44 years respectively.

Primary employment: 54% of the respondents said their primary employment was business, 20% were government officials, 17% were business executives, 7% were female house-wives belonging to others category and 2% belonged to the student category. 34% of the male businessman were graduates, 45% were either under-graduate or senior secondary pass. Only 9% were postgraduates or doctorates and the retired personnel constituted the rest of the respondents. Female respondent who said their primary employment is business were either graduates or post graduates. Among government officials all were males; the business executives included 75% males and 25% females. All the males were post graduates and all the females were either graduates or post graduates.

House hold size : 18% respondent said there were 2 family members; 20% said there were 3 family members; 52% said they have a family of 5; 8% said there family size is more then 5; and 2% refused to answer.

Family income: 35% respondents showed that there annual income was less than Rs. 3,00,000; 24% had income between Rs 3,00,000-5,00,000; 21% said there income was between rs.5,00,000-8,00,000; 14% showed there income to be between rs.8,00,000-10,00,000; and 6% showed there income as more than Rs 10,00,000. Their mean income was Rs. 5, 46,512.

TABLE 3: DESCRIPTIVE STATISTICS OF SAMPLE

VARIABLE	ALL CARDS
Information search	
Almost no shopping	16.3%
Little	6.1%
Moderate	40.9%
Good amount	13.9%
A great deal	22.8%
Bad credit history	17.7%

Level of payout	
Almost always	52.2%
Sometimes	20.2
Hardly ever	27.6%
Number of bank types credit cards	
Mean	2.3
Median	2
Age	
25-34years	3.8%
35-44 years	42.0%
45-54 years	20.3%
55-64years	28.0%
65 years or more	5.9%
Mean	48.5%
Household income	
Less than Rs 3,00,000	35%
Rs 3,00,000 -5,00,000	24%
Rs 5,00,000-8,00,000	21%
Rs 8,00,000-10,00,000	12%
More than Rs 10,00,000	8%
Mean household income	Rs. 5,46,512
Household size	
Mean	3.6
Median	2.2

Table 4 : Mean APR and Rupee savings for revolvers across the extent of search

VARIABLE	APR
Intercept	17.228(0.00)
Extent of information search	-0.366(0.00)
Bad credit history	0.946(0.00)
Level of balance payoff	0.085(0.27)-
Number of bank type credit cards	0.098(0.15)
Demographics	
Age	0.004(0.69)

Household income	-0.117(0.22)
Education (Sr. Sec/under graduate)	-0.423(0.45)- 0.196(0.11)-
Graduate degree	0.380(0.28)-
Post graduate	0.489(0.25)
Doctorate	
Household size	0.062(0.53)

(Negative number indicates paying more in interest i.e. negative savings.)

ANALYSIS OF DATA: Questions 1 to 7 are dealt with separately as these contain the demographic variables of the respondents. The relevant information is summarized in Tables 3, 4 & 5.

Tabulation of responses:

The summary of the responses to Questions Nos. 8 to 21 of Questionnaire – I, are given in Table – 1 below:

TABLE 1: EXPOSITION OF RESPONSES TO QUESTIONS NO. 8 TO 21

Questions	a	b	c	d	e	f	g
Question 8	11	78	0	10	1		
Question 9	8	80	0	12	0	0	
Question 10	42	4	16	38	0	0	
Question 11	42	10	22	16	8	2	
Question 12	38	20	10	7	3	14	8
Question 13	52	48					
Question 14	38	20	2	40	0	0	
Question 15	95	5					
Question 16	68	32	0	0			
Question 17	15	10	25	20	5	25	
Question 18	48	30	12	10			
Question 19	15	8	25	4	26	20	2
Question 20	40	20	15	12	13	0	0
Question 21	68	30	2				
Question 22	10	48	32	10	0	0	
Question 23	68	32					
Question 24	15	55	25	5	0		

Question 25	25	23	38	14	0		
Question 26	68	22	5	5	0		
Question 27	68	30	2				
Question 28	90	10					

DATA AND ANALYSIS OF CREDIT CARD USER BEHAVIOR

The data was collected on the basis of administration of questionnaire. The first eight questions were related to demographic factors. These demographic include age house hold income education house hold size occupation and gender. These factors are discussed separately.

Table 2: Description of Variables

VARIABLES	DESCRIPTION
DEPENDENT VARIABLES	
APR on primary credit card	Actual APR on only card ,or card with highest outstanding balance
Rupee savings in interest payment	(average APR – actual APR)*(outstanding balance)
INDEPENDENT VARIABLES	
Information search	Ordinal,1(almost none) to 5 (a great deal)
Credit history	1 if turned for loan or obtained smaller loans than applied for
Credit card use patterns level of payoff number of credit cards	Ordinal ,1(almost always)to 3(hardly ever) actual number of bank type credit cards
DEMOGRAPHICS	
Age	Age of reference person
Household income	Log of annual total household income
Education: Sr. Sec or less	If years of education <12
Under graduate	If years of education > 12 and <15
Graduate degree	If a college degree is earned
Post graduate	If the years of education >16
Doctorate	Holding a Ph. D. degree
Household size	Number of people in household

DATA ANALYSIS

Question regarding mode of the payment for smaller purchase up to Rs. 2,500 was responded by a significant number (78%) of consumers using credit card. In response to the question, regarding the mode of payment for purchases between Rs. 2,500 up to Rs. 5000 80% used cash

as mode of payment. Responding to the question regarding influencing the decision to obtain the credit card, 42% reported they were influenced by pamphlets provided by the credit card company and 16% by family/ friends, 38% reported the influence of previous dealing with the credit card company, 4% reported financial advisors influencing there decision and none reported the part of a package deal as the reason. As to the question related to time interval between seriously considering taking out the credit card and signing application, 42% respondents they considered it on the day of signing application, 10% considered it at least one day before 22%, considered it at least a week before, 16%, at-least a fortnight before, 8% responded to at least a month before and 2% could not remember. In response to the question related to the factors associated with credit card, 38% responded with interest rate offered, 20% interest free period, and, 10% low fees and charges as the reason for owning the particular credit card, 14% cited good reputation of the company and 8% previous dealing with the company as a reasons, and 7% said that convenience of having a credit card and willingness of the credit card company to provide loans as the reasons to own the credit card, whereas 3% responded to incentives offered.

Responding to question, 52% of the credit card holders said that they were offered alternative products by the credit card company while 48% said they were not offered such products. In response to follow-up question, of the respondents, who were affirmative to the above question said, personal loan (38%) and over draft (20%), a different type of credit card 40%, and house hold credit limits only 2%, were the alternative products offered. Do not remember and others constituted 0% each.

Responding to question a significantly very high (95%) of the respondents mentioned bank as the institution to obtain a credit card while 5% stated it was a departmental store.

When asked whether the credit card company provided them with information about the credit card terms, 68% said they read the information before they used the credit card, whereas 32% said they did not read. None of the respondents reported that they were not provided with this information, nor if they can't remember. Those who read the information were asked through how long before they used the credit card did they read the information? 15% said just before using, 10% said at least an hour before using, 25% read it at least a day before 20% said at least a week before, 5% reported after using, and 25% could not remember. When asked weather this information was helpful or not, 48% responded by saying it was mostly helpful, 30% said it was

mostly unhelpful, 12% said it was neither helpful nor unhelpful and, 10% said they did not know. Next question was asked about the reason to find the information. 15% of the respondents cited the reason as the information explained repayment, 8% interest rates as the reason and, 25% as fees and charges, others responded by saying that the information was easy to understand 26%, and told them what they needed to know 20% as the reasons, where as, 4% respondents said that the information explained loyalty scheme. 2% stated clarity about credit cards as the reason but none responded to nothing. When asked what was not helpful about the information the respondent who earlier responded that information was mostly unhelpful, explained that it was difficult to make sense (40%), difficult to understand (20%) and too long and detailed (15%), constituted a total of 75%; other 25% responded by saying about no clarity with respect interest rate (12%), repayment rate and fees and charges (13%). None of them responded to the option of it being a large amount of useless information. When asked whether this information in any way affect their decision to use the credit card 68% said yes and 30% said no whereas 2% said don't know. The respondents who responded affirmatively were further asked as to how it influenced their decision. 10% said they were hesitant in using the credit card, 48% respondents wanted to discuss terms with the credit card company, 32% said it made them consider other credit card offers, where as, 10% felt that they were confident about taking out the credit card. None of them gave any other reason, an, none said don't know.

Question no. 23 asked the credit card holders about how many credit card company did they approach before getting a credit card, a significant no. of respondents (68%) responded they went to only one credit card company Those respondent who went to only one credit card company were further asked how many credit card company did they consider before taking out their credit card, 15% considered two credit card company; 55% considered three/four credit card companies; 25% considered five/six credit card companies and 5% considered more than 6 credit card companies. None of them responded to can't remember. At this stage, they were asked what was easy to compare between the loan products offered by the credit card company, 25% responded with interest rate, 23% with fees charges, 38% responded with credit card conditions such as re- payment time and 14% responded with incentives offered such as loyalty schemes and frequent flier points. None responded to any other reason. They were further asked through as to what was difficult to compare. 68% respondents stated that the differences in the credit cards were confusing; 22% responded by saying that information provided did not allow easy

comparisons, 5% said making comparisons was time consuming and 5% responded by saying that it was difficult to find the relevant information. None responded to any other reason. They were asked whether they compared interest rate between the credit card companies before taking out the credit card, 68% said yes while 30% said no; whereas 2% said don't know. They were further asked whether they know about current interest rate on their credit card, 90% said yes and they specified their interest rates while 10% said they do not know.

RESULTS AND DISCUSSIONS

The study indicated that most often the retail purchases were made by credit card consumers using their credit cards. It further indicated that cash remained a poor cousin to the credit cards for such purchases.

The study further indicated that the major source of information regarding credit cards were pamphlets provided by the credit card companies, followed by previous dealings of consumers with credit card companies. Influence of family members or friends was also acknowledged. The time period between seriously considering owning a credit card and applying for it appeared very short. The study indicated that consumers did not bother much about gathering important information pertaining to credit cards before applying for it.

The study further indicated that interest rates offered interest free period, good reputation of the credit card company, and low fees & charges were the features of credit cards which attracted consumers the most.

The study revealed that personal loans, a different type of credit card and overdraft facility constituted the alternative products offered by credit card companies. It also indicated the inclination of consumers towards other services offered by their company.

The study further revealed that most consumers read the written information provided by Credit Card Company before using their card, although the time period between reading information and usage of credit card was very short, yet it appeared to be helpful to them. Among the features which were deemed helpful in understanding information include-easy to understand, provide needful information, explain fees & charges, explain interest rates, and explain repayments- in that order.

The study further indicated that among those who found this information unhelpful, cited the reasons such as difficult to make sense, difficult to understand, too long and detailed, not clear

about charges, and, not clear about interest rates- in that order. Majority of respondents however reported the influence of such information on their credit card purchasing decision, which include terms of credit card and other credit cards offered by other companies.

CONCLUSIONS

The following conclusions could be drawn safely:

1. Most of the credit card holders use their credit cards to make retail purchases.
2. Most of the information about credit cards received by credit card consumers was obtained from pamphlets or previous dealings with credit card companies.
3. The consumers of credit cards were attracted towards owning it because of personal loans, overdraft facilities, interest rates offered and interest free period offered by the card issuing company.
4. The information regarding the credit cards was mostly ignored by the consumers at the time of owning a card but reported that it was helpful in explaining repayments, interest rates, fees & charges, was easy to understand, and provided them with what they needed to know.
5. The consumers of credit cards discussed the terms with Credit Card Company and also considered the offer made by other credit card companies. Most of the credit card consumers considered between three and six such companies before shopping for their credit cards. They found interest rates, fee & charges, and credit card terms and conditions such as repayment time, easy to compare amongst the loan products offered by credit card companies.
6. The differences in credit cards were confusing and the information provided, did not allow easy comparison.

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