

**Project Dissertation Report on  
Factors affecting credit card use in India  
post covid- 19**

Submitted By

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2K20/DMBA/48

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## **CERTIFICATE**

Certificate This to certify that the report of the submitted project work entitled “Factors affecting credit card use in India post covid- 19” carried out by Himanshu Gupta bearing Enrolment No. 2K20/DMBA/48 under my guidance and supervision for the award of Degree in Master of Business Administration of Delhi Technological University, Delhi, fulfils the requirement of the ordinance relating to the MBA degree of the University and is up to the desired standard for the purpose of which is submitted to the best of my knowledge.

Dr. Archana Singh  
Associate Professor

## **DECLARATION**

I, Himanshu Gupta, Roll No. 2K20/DMBA/48 declare that the Project Report/Dissertation named "Factors affecting credit card use in India post covid- 19" is a true work did by me. The matter typified in this task work has not been submitted before for the honor of any degree or certificate apparently and conviction."

Signature

Himanshu Gupta

## **ACKNOWLEDGEMENT**

At the outset of this project, I'd like to express my honest and sincere gratitude to all of the individuals who have assisted me in this endeavor. I would not have progressed in the project without their energetic leadership, assistance, teamwork, and consolation.

I'm grateful to my faculty mentor Associate Professor Archana Singh for her significant direction and support in bringing this exploration project to a successful conclusion.

I'd want to express my gratitude to the Delhi School of Management at Delhi Technological University for providing me with this opportunity.

I consider this open door to be a significant step forward in my professional development. I'll work hard to put my newly learned skills and knowledge to the best possible use, and I'll keep working to develop.

Thanking You,

**Himanshu Gupta**

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## **EXECUTIVE SUMMARY**

This study aims to the impact of covid 19 on the use of credit cards in India. Also, to study the impact of value that a credit card user gets with the ease of using it. Within this scope, we floated a questionnaire containing 13 questions based on Credit Card use by Indian people of various ages and professions. We have used Cronbach's analysis to assess the questionnaire's internal accuracy. The internal consistency of the test items was 0.97, which is considered EXCELLENT. For the questionnaire, we received 70+ responses in a short period. Moreover, the regression method was taken into consideration to achieve this objective. As a result of the analysis, it was determined that the ease of using credit cards and the value associated with using a credit card are not related. Value is dependant, and the ease of doing variables is independent. And people use credit cards irrespective of the ease of using them.

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## LIST OF ABBREVIATIONS

<b>S.No.</b>	<b>Abbreviated Name</b>	<b>Full Name</b>
1	CAGR	Compound annual growth rate
2	EMI	Equated monthly instalment
3	SBI	State Bank of India
4	fIs	Financial Institutions
5	AUM	Asset under management
6	MDR	Merchant Discount Rate
7	SIP	Systematic Investment plan
8	RD	Recurring deposit
9	BSE	Bombay Stock Exchange
10	SA	Strongly Agree
11	SD	Strongly Disagree
12	DEMAT	dematerialization account
13	RCA	Rupee Cost Averaging

# **CHAPTER – 1**

## **INTRODUCTION**

# CHAPTER – 1

## INTRODUCTION

### 1.1 Background

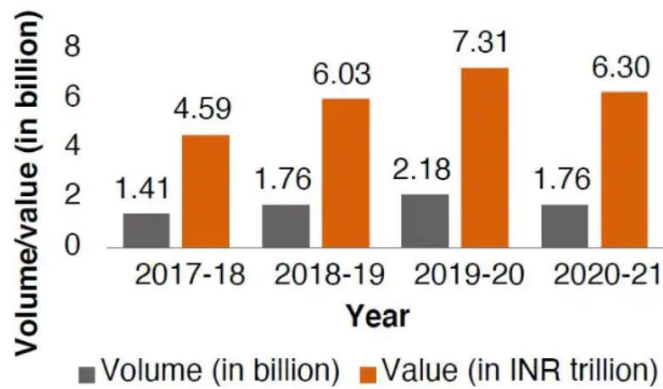
India is known for its debit card market. But India people dramatically accepted the credit card in the last decade. According to Monet Control Indians are using Credit card in maximum numbers than before. Many attractive offers by FIs is supporting this growth in Credit card Industry. Due to the offers the credit cards are widely used by people mainly millennial people.

Credit card market is growing at a CAGR of almost 20% for past four years especially in last 2 covid years in India. Credit user's increases from 29 mn in March 2017 to 62 mn in March 2021. In 2022 and 2023 it is expected to grow at rate of 26% and 29%, resp. The Covid whereas increased the growth in 2020 – 2021. This shows the change in the perspective of people towards credit cards and overall lifestyle.

A credit card is a payment tool that enables people to purchase products and services without cash. Consumers can benefit from using a credit card in a variety of ways. To begin with, clients can get funds up to the credit card limit. Another benefit of credit cards is that they allow consumers to buy something or get something done even if they don't have enough money at the time. Furthermore, cardholders have the option of paying for things in installments. A credit card also has numerous benefits for the country's economy. Credit cards encourage consumption in the country, which helps the country's economic growth. Furthermore, buying and selling using a credit card reduces unrecorded sales. Because of this situation, the tax revenue of the government will increase.

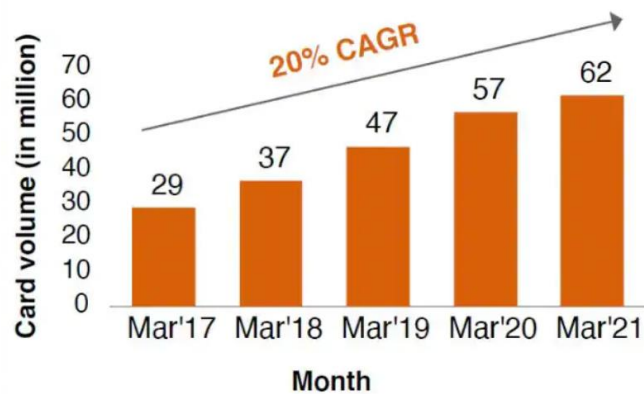
In India, the most widely used mode of payment become the UPI used payment systems. In 2020–21, the transactions volume of UPI transaction was significantly larger than that of credit or debit cards. During the same time period, the transaction value was almost same for all three payment ways. Here is the graph showing the credit card transactions year wise:

### Credit card transactions



Source: RBI

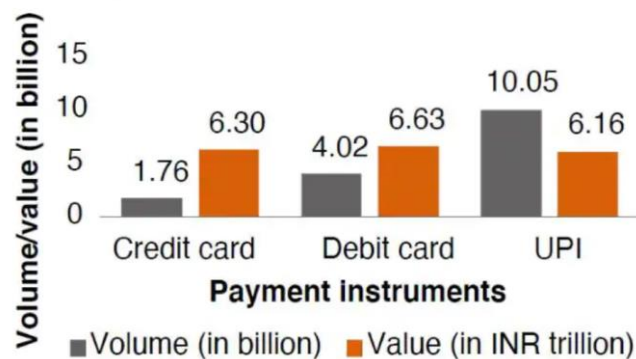
### Number of credit cards (in million)



Source: RBI

In India, 31 card providers have issued around 62 million cards to date. According to RBI data issued in March 2021, the top six issuers have a market share of roughly 81 percent of the 31 issuers, with the rest accounting for the remaining 19 percent.

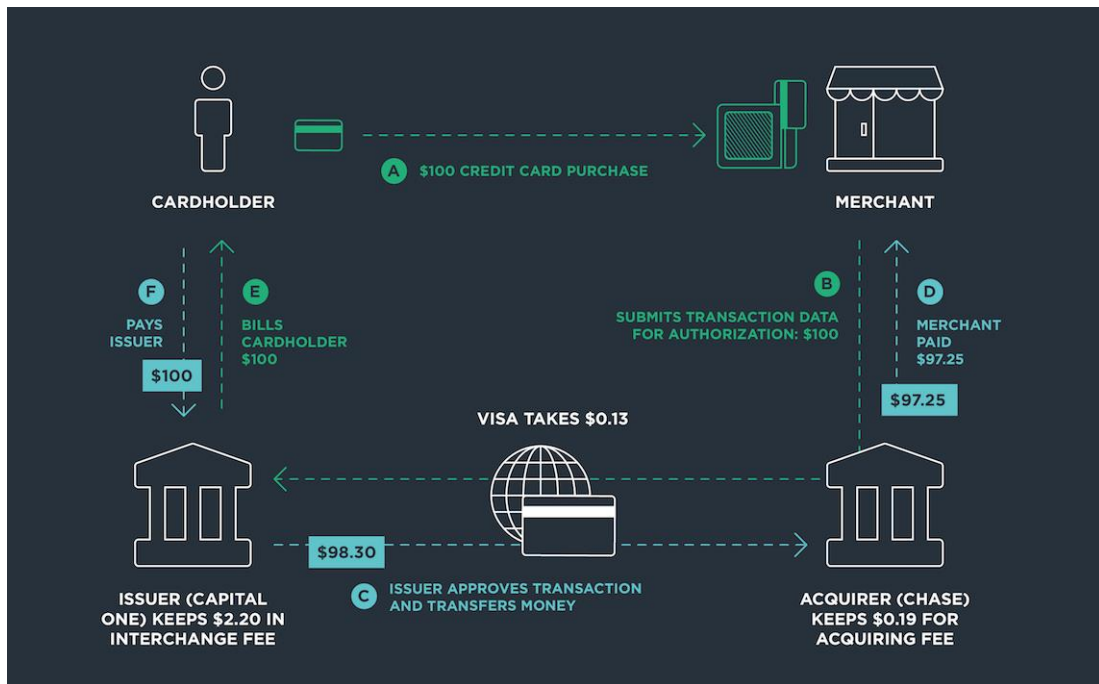
### Credit cards vs UPI vs debit cards (2020-21)



Source: RBI

## 1.2 Revenue model for Credit card issuers

1. Interchange Fees: Every merchant charge processing fee on the amount spent by the credit card holder. The amount of money that is transferred to issuers is known as interchange it is typically 1 to 3% in value. Generally payment method define their cost depending on volume and type of transaction.
2. Late payment fees: Most credit card used prefer not to pay their credited amount in full each month. This unpaid credit attract an interest of 2% to 4% on that amount. Mostly credit card users forget to pay their monthly credit card bill and that type of customer prove to be the most profitable for the company.
3. Annual charges: Annual renewal and sign-up costs apply to specific Cards. For example, the American Express Platinum Travel Credit Card includes a membership cost of Rs.3, 500, followed by an annual fee of Rs.5,000 the next year.
4. Foreign exchange charges: When you make a purchase in a currency other than your home countries, then you have to pay a specified currency conversion rate, and a foreign currency conversion charge is applied to your account.
5. Balance transfer fees: When you transfer debt from one credit card to another in order to get a reduced interest rate, you'll normally be charged a fee of 3% to 5% of the amount transferred. Some credit cards do not impose these fees or waive them for a limited time.
6. Rewards points & redemption revenue: When someone use reward points to purchase the banks charge a nominal fees. Sometimes, the shops have some strategic tie-ups with the issuer bank that allow the customer to earn bonus points by purchasing at these retailers. Such shops might also get in a relationship where they get rupee worth of bonus points.



Interest income makes for the majority of card issuers' total revenue. Approximately half of card revenue is obtained from interest income, which is derived by approximately 20% of repeating consumers. Customers are charged interest ranging from 18 to 42 percent depending on the product they are utilising.

The fee imposed by the issuer to process each credit card transaction generates exchange money. The acquirer pays the issuer exchange money derived from the MDR obtained through taking fees from merchant for every transaction. Normally, the issuer charges an interchange fee of 1.2–2 percent for various card and client categories. This accounts for approximately 20–25 percent of the card issuer's total income.

The issuer earns the remaining revenue by different types of fees and extra charges such as joining or annual fee, over-limit, cash advance, EMI conversion fee, etc. The issuer also does makes money through interest levied on some transactions, such as conversion of balance and loans exceeding allocated limitations, among other things.

### 1.3 Credit Cards in India

Credit card generally represents customer lifestyle and an increase in their standard of living. Being one of the fastest growing economy in Asia the credit card penetration remains limited in India. In recent times the covid 19 had a great impact on people's employment, earning,

spending pattern, technology advancement and attitude change. All these factors will have a significant impact on credit card adoption in India.

Although India has one of the world's fastest-growing economies, there remains a substantial disparity in access to formal credit, particularly when compared to other wealthy countries. Banks and financial institutions (FIs) are attempting to bridge this gap by offering new payment products and mechanisms that will make formal credit more accessible. Formal credit has traditionally been limited to financial items such as home, auto, and personal loans. Banks and financial institutions, on the other hand, have recently moved their focus to instruments such as credit cards, buy now, pay later (BNPL), and credit EMIs. Consumers have been disrupted by new FinTech businesses who have introduced new and creative products and services. Credit cards, BNPLs, and credit EMIs have all seen a surge in issuance and usage. Traditional banks and new start-ups are focusing on attracting new clients by enabling unbanked/underserved people access to loans.

## 1.4 Trends in the credit card industry

Some of the important trends coming up in credit card industry are as following:

- **FinTech disruption:** Many FinTechs, new-age banks, and original equipment manufacturers (OEMs) have joined the credit card issue industry. These players are forming co-branded relationships with banks in order to provide clients with best-in-class services.
- **Better mobile apps:** Customers today want better mobile apps with best-in-class user-experience (UX)/user-interface (UI), features, and do-it-yourself (DIY) services. Several issuers have already begun to work on this front.
- **New risk models:** In addition to the classic credit rating model, card issuers are experimenting with a variety of new credit risk models. These models can serve consumers with and without credit.
- **Contactless payments:** Mobile-based contactless, QR, and token payments are preferred by customers.



## **1.5 BNPL**

In recent years, BNPL (Buy now pay later) has coming out as the most popular means of payment. A recent study conducted by a analytics company stated that, BNPL has acquired more than 3% of the market share in the online payments segment, and this figure might rise to almost 9% by 2025. Among the current generation it is becoming a popular kind of short-term borrowing method.

### **Features**

- Depending on the use case, the average transaction limit is between INR 1,500 and 25,000.
- Some players provide limits in credit card of up to INR 1 Lacks with a minimal int. rate.
- The repayment cycle lasts 15–45 days.
- The sole free source of short-term credit for new-to-credit clients is BNPL, and unlike typical credit cards, it does not require a previous credit score.
- When compared to card payments, BNPL is faster and more convenient. As a result, clients are utilising it for paying tickets like paying for train tickets.
- Buy Now Pay Later can enter previously untapped markets, such as clients with absolutely zero or poor CIBIL scores. It also getting more and more popular among the current generation, who do not have easy access to credit cards. They primarily utilise BNPL to acquire electronics, travel, and so on.

## **1.6 Credit EMIs option**

Credit EMIs option, also known as consumer durable loans, are one more type of formal credit that is rapidly expanding as a result of rising urban populations, increased consumption income of people, very low interest credit, and disruption by some FinTech companies.

According to a news portal analysis, the consumer durable loans market is predicted to rise at a CAGR of 24% to Rs. 205 billion in 2026–27, up from INR 84 billion in 2020–21.

## **Features**

- Most players offer simple approvals with minimal documentation requirements. Mobile numbers can be used to complete KYC requirements.
- Processing fees are low, and interest rates are reasonable.
- In some circumstances, no-cost EMIs are available.
- Most of the players do not require a security deposit or a down payment.
- Offers a duration ranging from 3 to 60 months.
- Loans ranging from INR 5,000 to INR 15 lakh are available.

## **1.7 COVID-19 Acts as a Catalyst for Widespread Adoption of Digital Payment Frameworks**

Until 2019, the country's digital payments growth was slow and uneven. Culture, democratisation, and technology were among the explanations given, many of which were economists in various phases of development. The long-term ambiguity of the COVID-19 issue, on the other hand, will result in the public being accommodated on digital payment systems nearly as much as power. With 5.1 billion unique users and 3.7 billion unique Internet users by the end of 2019, inbound wireless connectivity will be considerably improved, facilitating the easy implementation of digital payment platforms. With so many competitors providing digital payment platforms, the competition should assist to sharpen the app's user experience, as poor performance will cause consumers to vote with their wallets.

## **1.8 How COVID-19 Increases Global Digital Payment Adoption**

According to data available on money control, the rate of digital payment adoption is increasing from 2019. Furthermore, it was a significant shift in every category and country. The COVID-19 virus has encouraged the use of digital payment systems. Although numerous economic issues are in varying phases of growth around the world, the outbreak has prompted individuals to adjust their purchasing habits in order to interact with eCommerce and m-commerce. This has increased the growth of digital payments. We might hope that the coronavirus issue will be resolved soon, but an increasing number of smartphone users will drive the future development of digital payments. While the majority of competitors will have digital payment solutions, customers will surely have a better experience. While the majority of competitors will have digital payment solutions, customers will surely have a better experience. Digital payment

options, whether in the form of a digital wallet or another mode of communication, are here to stay. Now let's discuss how many credit cards were issued during pandemic.

### **1.9 Collection of credit card debts during COVID-19**

Credit card companies experienced severe interruption as a result of COVID-19. Issuers responded to interruptions and related pressures in a variety of ways, including operational modifications as well as changes to debt collection rules, processes, and practises. In response to various state and federal constraints, such as stay-at-home orders and other business restrictions, all card issuers reported shifting their collections operations from on-site to work-from-home arrangements. Due to state and local constraints, certain issuers reported temporarily suspending multiple brick-and-mortar collections operations centres.

Many issuers suspended placing accounts with third parties in states where there were different state-mandated debt collection restrictions, including conducting outbound calls, in accordance with COVID-19. In reaction to varied state limits and court closures, many issuers also suspended legal collection activities, such as lawsuits, judgements, garnishments, and bank levies. While many issuers reported beginning new lawsuit filings in the second half of 2020, some had yet to resume fresh income garnishments and bank levies as of December 2020 due to difficulty establishing the source of stimulus cash in consumers' bank accounts.

In addition to the existing array of short- and long-term hardship programmes, all issuers reported offering some form of a skip-a-pay programme of varied lengths. In order to accommodate pandemic-affected consumers, some issuers reported extending proactive settlement offer campaigns and decreasing the settlement threshold by five to ten percent. All issuers reported changing their agency-placement recall technique to account for non-payment owing to enrolment in pandemic-related hardship programmes. Because of all this the banks recorded a spike in credit card applications in couple of years.

### **1.10 Objective-**

- The purpose of this research is to study the impact of value that a credit card user gets with the ease of using credit card after Covid pandemic.
- Analyze the preferred payment mode by people in India.

## **Scope of the project-**

The research is based on the study of human behaviour and its impact after Covid on use and adoption of credit card in India. To get a better understanding we floated a questionnaire containing 13 questions based on Credit Card use by Indian people of various age and professions.

# **CHAPTER - 2**

## **LITERATURE REVIEW**

## **CHAPTER - 2**

### **LITERATURE REVIEW**

With the help of a literature review, we can get an overview of previously published works on any specific topic. These are the research papers published earlier:

**(Jain, Sarupriya, Kothari 2020)** The negative impacts are damaging significant areas of the Indian economy such as airfare, airlines, and hospitality, and you are feeling exposed. The defined boundaries for halting COVID-19 outbreaks before they become uncontrollable have an influence on digital, online, and offline transactions conducted by key firms. While client traffic to digital channels remains high, payment costs have reduced considerably. If this pattern continues, businesses in the digital payments sector will suffer in the following two to three months as people become more aware of the outages. The unpredictable times we live in, when the impact of the Coronavirus outbreak has had an economic and social impact, can have a transitory influence. The unpredictable times we live in, with the economic and social impact of the Coronavirus outbreak, can have a temporary impact on shopping habits, among other things. It would be a huge boost for ecommerce, as well as popular food, entertainment, and food. Going back four years, digital payments have increased significantly from 5% to 30%, aided by demonetisation and the government's continued drive to develop the unwanted Indian economy. Online travel aggregators, movies and resorts, and the entertainment business account for the majority of the digital payments industry in India, accounting for approximately 40% of the total. Everything else is financed by local debt and financial services.

**(Goyal, 2010)** The current study seeks to comprehend the significance of supplementary services as no personal sources of information for customers to deal with perceived risk linked with the purchase of credit card services. The influence of extra services is being examined in particular in terms of functional risk and psychological risk. The study is based on primary data gathered through a survey and a questionnaire completed via personal interviews. It has been discovered that supplemental services can play an important role in managing the functional and psychological perceived risk connected with credit card services. Credit card marketers can increase the value of services to clients and hence increase buy opportunities by lowering perceived risk through controllable additional offerings. The perception of risk in financial services marketing is an issue. Perceived risk in financial services marketing is an essential

consideration for customers making purchasing decisions, as well as a concern for service marketers. It is a novel investigation of the relationship between perceived danger and supplementary services.

**(Yüksel, 2016)** The purpose of this research is to identify the macroeconomic factors that influence credit card usage in Turkey. Within this scope, quarterly data from 01/2005 to 02/2016 were employed in this study. Furthermore, the MARS (Multivariate Adaptive Regression Splines) method was considered in order to attain this goal. According to the findings of the study, there is a negative relationship between credit card usage and the unemployment rate. Another finding from this study is that people in Turkey use credit cards more frequently when interest rates are high. While thinking about these concerns, it became clear that the Turkish government should focus on these aspects in order to encourage credit card usage.

**(Sari, Rofaida, 2011)** The purpose of this study was to obtain insight into and assess the factors that influence credit card usage in the UPI university community using the Theory of Planned Behavior model method. Using Path Analysis to explain the direct and indirect influence of attitude, subjective norm, and behavioural control on credit card usage intention and behaviour. All respondents had a positive attitude about credit card usage, with a high influence of subjective norm, high behaviour control, high intention to use credit cards, and all respondents used credit cards sensibly, according to the findings. There was a positive and substantial relationship between behavioural attitudes, subjective norms, and behaviour control and the intention to use a credit card, either concurrently or partially. According to the preliminary findings, attitude has the largest influence on default debt risk behaviour. The findings also demonstrated that the intention to use a credit card had a positive and significant relationship on default debt risk behaviour.

**(Khare, Singh, 2011)** The goal of this study is to determine the moderating effect of Multi-item List of Value (MILOV) on credit card qualities, age, and gender in credit use among Indian customers. The study investigates the impact of "lifestyle" characteristics on credit card use (convenience, use patterns, and status). The mall intercept approach was used to collect data in six Indian metropolitan areas. Customers visiting the malls were given a self-administered

questionnaire. The study does not investigate the impact of consumer income, occupation, and education on credit card use because many customers were unwilling to provide this information. These demographic factors can have an impact on customers' attitudes toward credit card ownership and use.

**(Chien, Devaney, 2015)** The majority of past research on credit use has explored the effect of socioeconomic and attitude variables without taking into account the possibility of relationship between these factors. Furthermore, the studies did not examine if there is a distinction between general and specialised views regarding credit and credit utilisation. This study tackles those issues and examines both instalment debt and credit card debt. The data for the study came from the 1998 Survey of Consumer Finances. According to the findings, the higher the specific attitude index, the larger the outstanding credit card balances, and the bigger the instalment debt, the more favourable the overall attitude toward using credit. The findings suggest that consumers and consumer educators should be more aware of the impact of attitude on credit use.

I studied these research papers and learned that none of these studies was focused on the impact on the adoption of credit cards post covid 19.



**CHAPTER – 3**  
**RESEARCH METHODOLOGY**

## CHAPTER – 3

### RESEARCH METHODOLOGY

#### 3.1 Research design

- ❖ Data: The study is based on primary data collected by a survey with the help of a questionnaire administered through Google forms.
- ❖ Research methodology: For this study we use Regression analysis test to study the relations between the different factors affecting buying behavior and Cronbach alpha is used to check the likert scale relevance.

#### 3.2 Data Collection

Primary data was gathered by floating questionnaire among friends, family and social media. Administered through google form. And Secondary data was gathered and obtained from newspapers, journals, books, and periodicals to gain an overview of the credit card industry in Indian market. After collecting all the relevant data for this study we use Regression analysis test to study the relations between the different factors affecting buying behavior and Cronbach alpha is used to check the Likert scale relevance.

#### 3.3 Survey Development

This study focuses on the impact of underlying characteristics on credit card usage post covid. A sample of credit card users was surveyed for this study, and their behavior was analyzed using the **regression analysis test**. The questionnaire was designed in accordance with the hypotheses and previous studies. The findings can be of great use to international and Indian banks or FIs in marketing credit cards.

#### 3.4 What Is Regression?

In Investment, finance and other finance field a statistical method is used called Regression. It is use to identify the character and strength of the relationship b/w one dependent variable also called Y and one independent variable also called X.

With the help of regression method the investor or research can understand the link b/w two variables like rise or fall in the price of ITC and change in Sensex.

There are two most common type of regression available they are simple linear regression and multiple linear regression. For even more complex data one more is available called nonlinear regression. Two or more variable are use in multiple linear regression whereas one dependent variable is used in simple linear regression.

Regression can benefit anyone from finance to analytics. It can also come handy while estimating the sales, GDP, revenue and other factors. CAPM is the most popular regression model among all.

### **3.4.1 Independence**

An X2 test for independence could be employed while evaluating student gender and course that student selected. To conduct this test, the researcher would collect data on the two chosen variables i.e. sex and courses chosen and then compare the frequencies with which male and female students select among the available classes using the formula and a X2 statistical table.

If there is no relationship between sex and course selection (if they are independent), then the actual frequencies at which male and female students select each offered course should be expected to be roughly equal, or we can say that the proportion of male & female students in any selected course should be roughly equal to the proportion of male & female students in the sample.

### **3.4.2 Goodness-of-Fit**

X2 is a method that help to determine how well a sample of data matches the core characteristics of larger population that the sample is must represent. This is what Goodness of Fit called. And if sample data fail to match with the expected attributes in population interest, one should not use that sample to draw insights about wider population.

**CHAPTER – 4**  
**DATA ANALYSIS &**  
**INTERPRETATION**

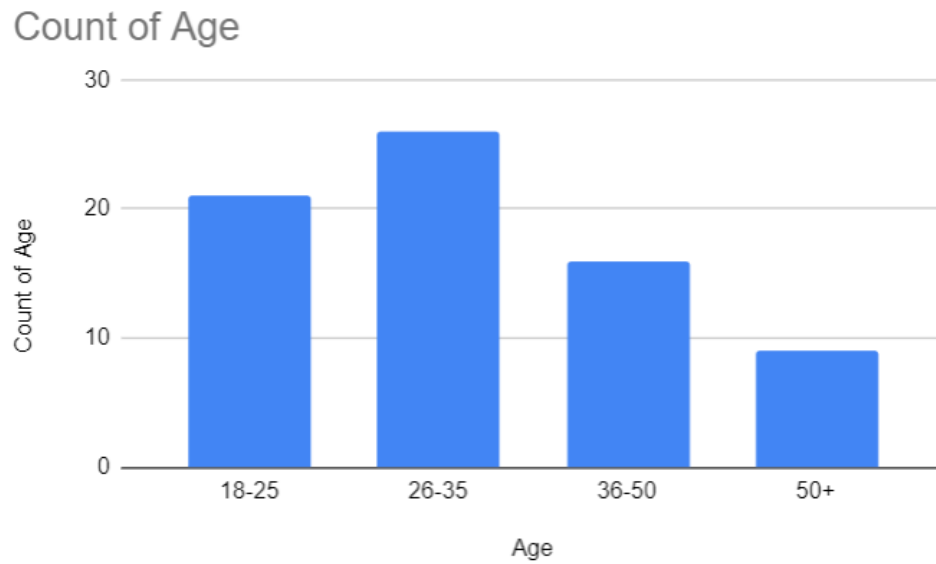
**CHAPTER – 4**

## DATA ANALYSIS & INTERPRETATION

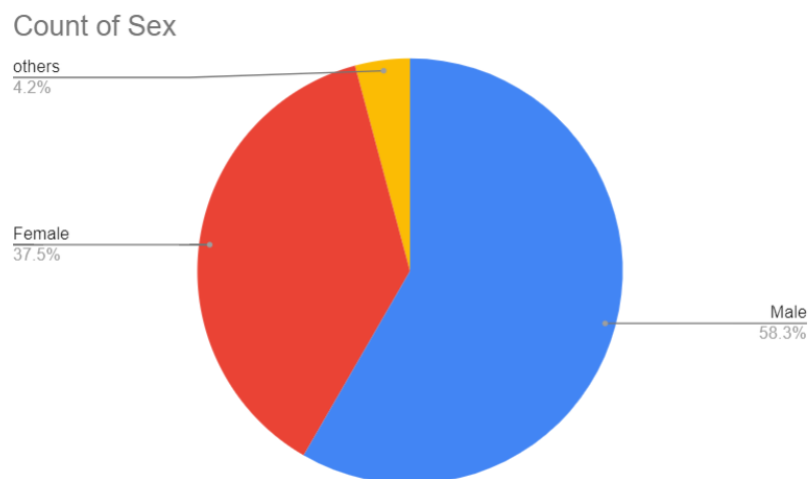
### 4.1 Questionnaire

From the questionnaire we got the following data:

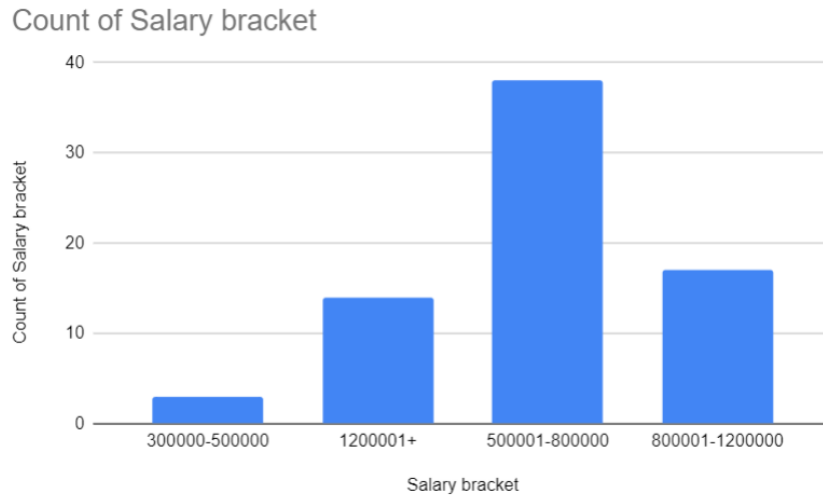
- **Age**



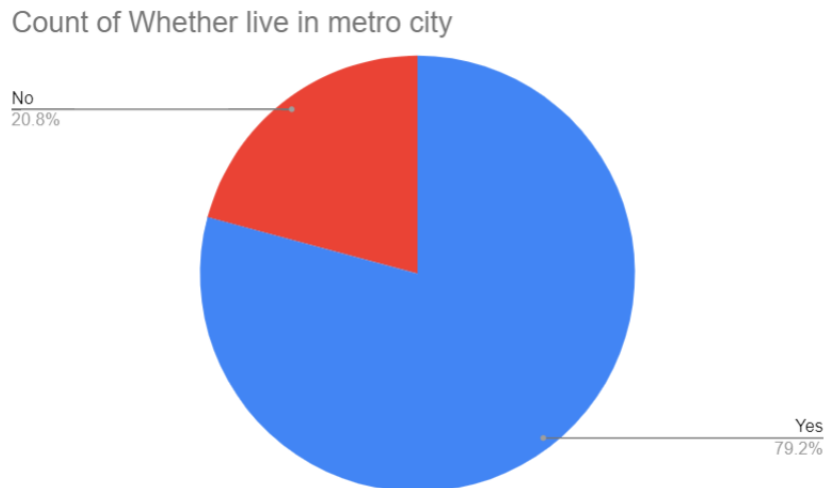
- **Gender**



- **Salary Bracket**



- **Demography Count**



## Responses data

Here we entered all the data in tabular form that we got from the questionnaire:

		SD	D	N	A	SA	Average
value1	Buying airline/railway tickets by using credit card at special counters save time	1	1	19	11	7	7.8
value2	I feel myself in safe hands due to zero/limited lost card liability	0	7	2	12	19	8
value3	I feel good about my decision to have additional facilities with my credit card	0	5	15	18	2	8
value4	I use credit card for extra discounts and cashback deals on many apps	5	0	10	23	2	8
value5	Is improving credit/CIBIL score also important to you	0	5	15	18	2	8

ease1	Do you prefer using credit card for payments over other third-party applications using UPI payments	0	0	12	27	0	7.8
ease2	Do you feel that your mode of making payments is easier than using credit card?	18	0	26	18	8	14
ease3	Do you feel digital payment is more convenient?	4	14	5	41	7	14.2
ease4	Would you like to switch to credit card in future?	9	19	6	19	17	14
ease5	Does using credit card make payment easier than other mode of payments?	1	0	19	14	6	8

### **Likert scale**

A Likert scale posits that an attitude's strength/intensity is linear, i.e. on a continuum from strongly agree to strongly disagree, and that attitudes can be quantified.

For instance, each of the five (or seven) responses would be assigned a numerical value that would be used to assess the attitude under consideration.

## **4.2 Data analysis**

**Cronbach's alpha** is a measure of internal consistency, or how closely linked a group of things is. It is regarded as a scale reliability metric. A "high" alpha value does not mean that the metric is unidimensional. Additional analyses can be undertaken if, in addition to testing internal consistency, you want to give proof that the scale in question is unidimensional. One way for determining dimensionality is exploratory factor analysis. Cronbach's alpha is not a statistical test; rather, it is a measure of reliability.

This table represents the Cronbach's alfa level of reliability:

<b>Cronbach's alpha</b>	<b>Internal consistency</b>
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

Anova: Two-Factor Without Replication

<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
Row 1	13	57	4.384615385	0.256410256
Row 2	13	48	3.692307692	0.397435897
Row 3	13	9	0.692307692	1.897435897
Row 4	13	11	0.846153846	2.641025641
Row 5	13	51	3.923076923	0.576923077
Row 6	13	5	0.384615385	0.58974359
Row 7	13	50	3.846153846	0.641025641
Row 8	13	50	3.846153846	0.641025641
Row 9	13	47	3.615384615	1.08974359
Row 10	13	31	2.384615385	1.423076923
Row 11	13	3	0.230769231	0.192307692
Row 12	13	49	3.769230769	2.192307692
Row 13	13	39	3	0.666666667
Row 14	13	13	1	3.666666667
Row 15	13	48	3.692307692	0.397435897
Row 16	13	9	0.692307692	1.897435897
Row 17	13	11	0.846153846	2.641025641
Row 18	13	51	3.923076923	0.576923077
Row 19	13	5	0.384615385	0.58974359
Row 20	13	50	3.846153846	0.641025641
Row 21	13	5	0.384615385	0.58974359
Row 22	13	50	3.846153846	0.641025641
Row 23	13	50	3.846153846	0.641025641
Row 24	13	47	3.615384615	1.08974359
Row 25	13	31	2.384615385	1.423076923
Row 26	13	3	0.230769231	0.192307692
Row 27	13	48	3.692307692	0.397435897
Row 28	13	9	0.692307692	1.897435897
Row 29	13	48	3.692307692	0.397435897
Row 30	13	9	0.692307692	1.897435897
Row 31	13	11	0.846153846	2.641025641
Row 32	13	51	3.923076923	0.576923077
Row 33	13	5	0.384615385	0.58974359
Row 34	13	50	3.846153846	0.641025641
Row 35	13	5	0.384615385	0.58974359
Row 36	13	50	3.846153846	0.641025641
Row 37	13	50	3.846153846	0.641025641
Row 38	13	47	3.615384615	1.08974359
Row 39	13	31	2.384615385	1.423076923
Row 40	13	3	0.230769231	0.192307692
Row 41	13	48	3.692307692	0.397435897
Row 42	13	9	0.692307692	1.897435897



Row 43	13	11	0.846153846	2.641025641
Row 44	13	51	3.923076923	0.576923077
Row 45	13	9	0.692307692	1.897435897
Row 46	13	11	0.846153846	2.641025641
Row 47	13	51	3.923076923	0.576923077
Row 48	13	5	0.384615385	0.58974359
Row 49	13	50	3.846153846	0.641025641
Row 50	13	5	0.384615385	0.58974359
Row 51	13	50	3.846153846	0.641025641
Row 52	13	50	3.846153846	0.641025641
Row 53	13	47	3.615384615	1.08974359
Row 54	13	31	2.384615385	1.423076923
Row 55	13	51	3.923076923	0.576923077
Row 56	13	5	0.384615385	0.58974359
Row 57	13	50	3.846153846	0.641025641
Row 58	13	5	0.384615385	0.58974359
Row 59	13	50	3.846153846	0.641025641
Row 60	13	50	3.846153846	0.641025641
Row 61	13	47	3.615384615	1.08974359
Row 62	13	31	2.384615385	1.423076923
Row 63	13	3	0.230769231	0.192307692
Row 64	13	48	3.692307692	0.397435897
Row 65	13	9	0.692307692	1.897435897
Row 66	13	9	0.692307692	1.897435897
Row 67	13	11	0.846153846	2.641025641
Row 68	13	51	3.923076923	0.576923077
Row 69	13	9	0.692307692	1.897435897
Row 70	13	11	0.846153846	2.641025641
Row 71	13	48	3.692307692	0.397435897
Row 72	13	9	0.692307692	1.897435897
Column 1	72	152	2.111111111	3.564945227
Column 2	72	149	2.069444444	3.699334898
Column 3	72	148	2.055555556	3.715179969
Column 4	72	168	2.333333333	4.873239437
Column 5	72	140	1.944444444	3.208137715
Column 6	72	163	2.263888889	4.366001565
Column 7	72	140	1.944444444	3.489827856
Column 8	72	112	1.555555556	2.532081377
Column 9	72	141	1.958333333	3.279929577
Column 10	72	152	2.111111111	3.536776213
Column 11	72	216	3	1.746478873
Column 12	72	249	3.458333333	1.153169014
Column 13	72	235	3.263888889	1.999804382

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ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Rows	2257.127137	71	31.79052305	40.69454753	3.016E-226	1.308140744
Columns	278.5726496	12	23.21438746	29.71637153	5.75771E-57	1.763530023
Error	665.5811966	852	0.781198588			
Total	3201.280983	935				

**Cronbach's alpha 0.975426683**

There were 13 test items on a five-point Likert scale in the questionnaire. We have used Cronbach’s analysis to assess the questionnaire's internal accuracy. The internal consistency of the test items was 0.97, which is considered EXCELENT.

**Regression Analysis**

Regression analysis was performed to analyse relation between value a credit card user gets and the ease of usage of credit card. Here, independent variable is ease of usage, dependent variable is the value.

Formula:  $y(\text{value})=ax(\text{ease})+k$

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.628601706
R Square	0.395140105
Adjusted R Square	0.19352014
Standard Error	0.08032334
Observations	5

ANOVA

	df	SS	MS	F	Significance F
Regression	1	0.012644483	0.012644483	1.959826276	0.256024015
Residual	3	0.019355517	0.006451839		
Total	4	0.032			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	7.767005	0.1424627	54.51959	1.36E-05	7.313625	8.220385	7.313625	8.220385
X Variable 1	0.016637	0.0118844	1.399938	0.256024	-0.02118	0.054459	-0.02118	0.054459

To predict impact of credit card use by people after covid, a multiple regression analysis was used. Here, we considered ease of usage as independent variable and value as dependent variables.

**CHAPTER-5**

**CONCLUSIONS & FURTHER SCOPE**

**OF STUDY**

## CHAPTER-5

### CONCLUSIONS & FUTURE SCOPE OF STUDY

#### 5.1 Findings

- It was found that the ease of using credit card and value that associated to using credit card are not related. And they are very negligibly related.
- Value is dependent and ease of doing variable is independent.
- People use credit card irrespective of ease of using it.
- Cronbach's alpha is being used to check the relativity of questionnaire.

#### 5.2 Limitations

Because of a lack of appropriate sources for data collecting the data is collected from a homogeneous group of people from almost same demography also we can't get enough responses. These are the most significant drawbacks during this study. These types of studies cannot be completed in a short period of time; a full, in-depth investigation is required to arrive at any relevant and appropriate conclusion.

#### 5.3 Conclusion

- People are using credit card irrespective of the value it provide or how easy it is to use.
- Ease of using credit card and value it give is not related to one another. They are independent to each other.
- Credit market has a very fast growth, the technological disruption & structural changes in the couple of years. The current crisis has impacted credit card adoption, by changing the major lifestyle of people and their behaviour towards spending and saving has changed the landscape of this industry in the last 2-3 years.
- Keeping this in mind that how less the credit cards could penetrate the Indian market and a large no. of big FinTechs entering in the market there is a bright future for credit card market in India.

## 5.4 Further scope for study

- i. The credit card market in India is dominated by Indian Banks. However in last few years lots of fintech companies entered the market and disrupted it and brought many new initiatives, new product offerings, and many more. These changes are bringing a whole new type of customers and this mode of payment creating new credit channels. So further we can study that how these new changes are impacting and bringing new untapped customers in market.
- ii. In India the credit card market is still very under penetrative. Less than 3% of total population use credit cards which is very low compared to other countries like US (66%), UK (65%), Brazil (40%) etc. It is a matter of study that why credit growth in India is very low and what other nations do to increase the acceptance and how it is benefiting them.
- iii. How other modes have also been impacted by the current situation. Data must be collected over a longer length of time, and research to be done over a longer period of time in order to arrive at a more accurate interpretation and analysis.

## References

- Jain & Sarupria(2020), The Impact of COVID-19 on E-wallet's Payments in Indian Economy, Volume 8, Issue 6 June 2020.
- Geetika Raheja (2021), The credit industry in India.
- Serhat Yüksel (2016), Identifying the Macroeconomic Factors Influencing Credit Card Usage in Turkey by Using MARS Method, China-USA Business Review, Dec. 2016, Vol. 15, No. 12
- Wiley (2001) The Effects of Credit Attitude and Socioeconomic Factors on Credit Card and Installment Debt, the Journal of Consumer Affairs, Vol. 35, No. 1 (Summer 2001),
- Shveta Singh, (2012),"Factors affecting credit card use in India", Asia Pacific Journal of Marketing and Logistics, Vol. 24 Iss 2 pp. 236 - 256
- Rofi Rofaida (2011) Factors Affecting the Behavior of University community to Use Credit Card.
- Anita Goyal (2008) Managing perceived risk for credit card purchase through supplementary Services.