

Analysis of the factors affecting different types of debts

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Introduction:

Loans Debts are crippling millions of people in the United States and it has been a major concern for the government. There is a varied range of consumer debts such as credit card debts, medical debts, student loan debts, personal loans, cell phone bills, utility bills, bank overdraft charges, auto loans, payday loans, etc. With 1.5 Trillion dollars in student loans alone, students fresh out of college who are increasingly finding it difficult to pay off their loans and defaulting on the student loan can cause serious consequences. Similarly, medical debt cripples the older population with approx 72 million people under medical debt. Due to these concerns, it is necessary to find and analyze the factors which affect the rise in debt so that necessary interventions can be introduced to keep it in check.

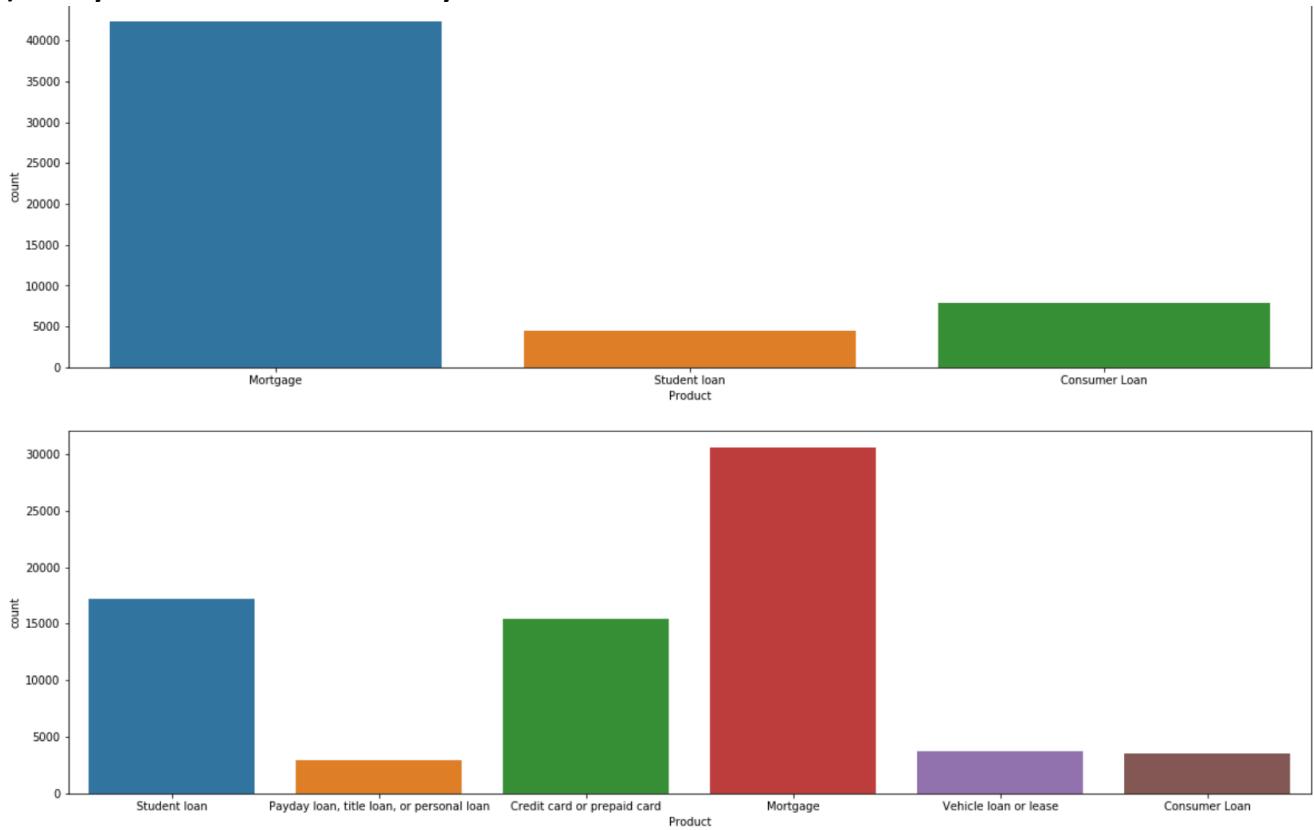
Hypothesis:

We are checking the below hypothesis to conduct the analysis:

- 1) States with a better public transportation system could have a lower number of vehicle loans.
- 2) States with a higher income might have a higher number of credit card issues than other states as in those states, credit cards are issued to a larger number of people.
- 3) Diving more deeply into the analysis, we would analyze the complaints registered with respect to each type of loan and the common issues faced with each of those.

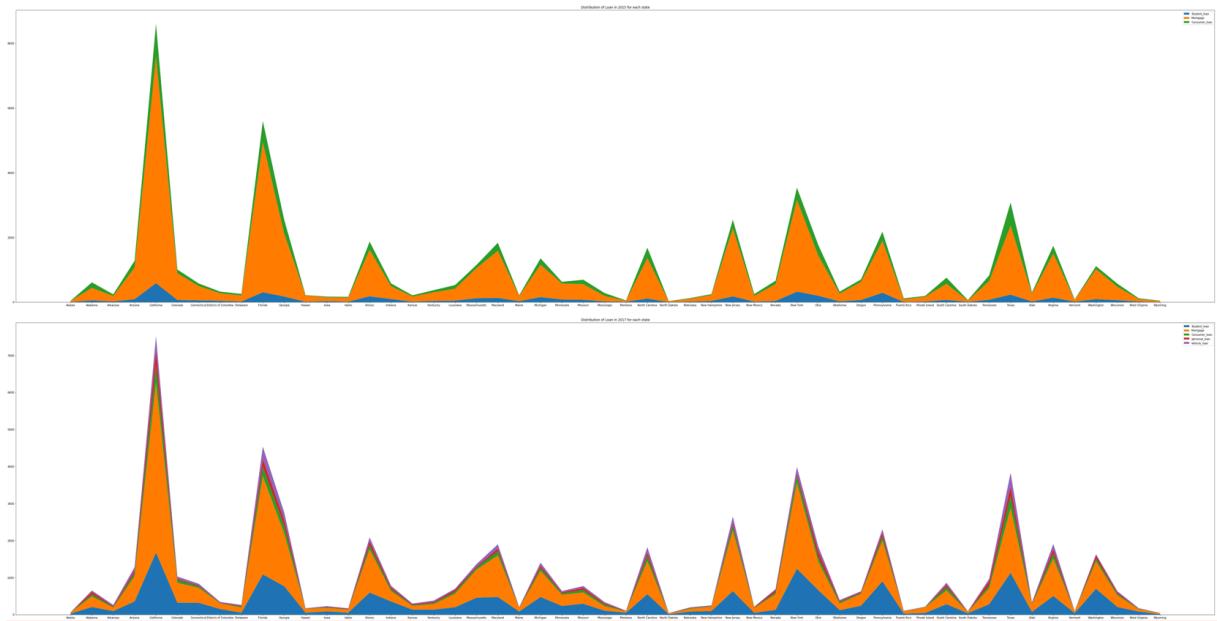
Results from the analysis:

1) Yearly loan distribution for the year 2015 and 2017



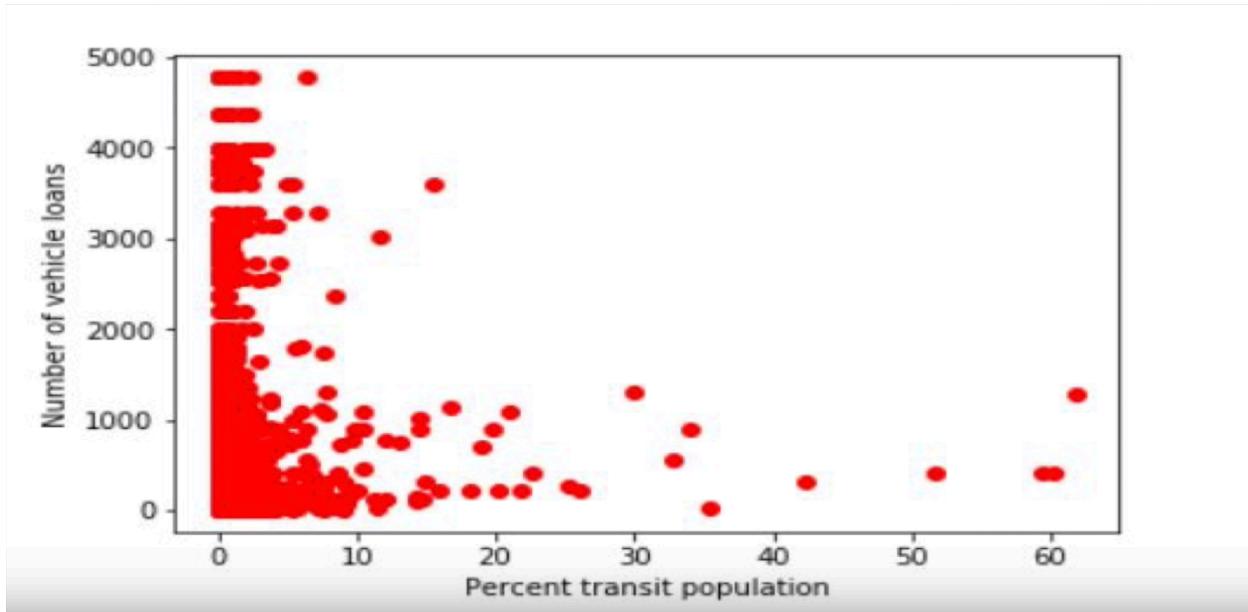
Analysis: In 2015, it was found that mortgage loans accounted for highest number of complaints followed by consumer loan complaints and then in 2017 Mortgage loan again had the highest number of complaints followed by student loan issue and then credit card related complaints.

2) State wise distribution of different types of loans



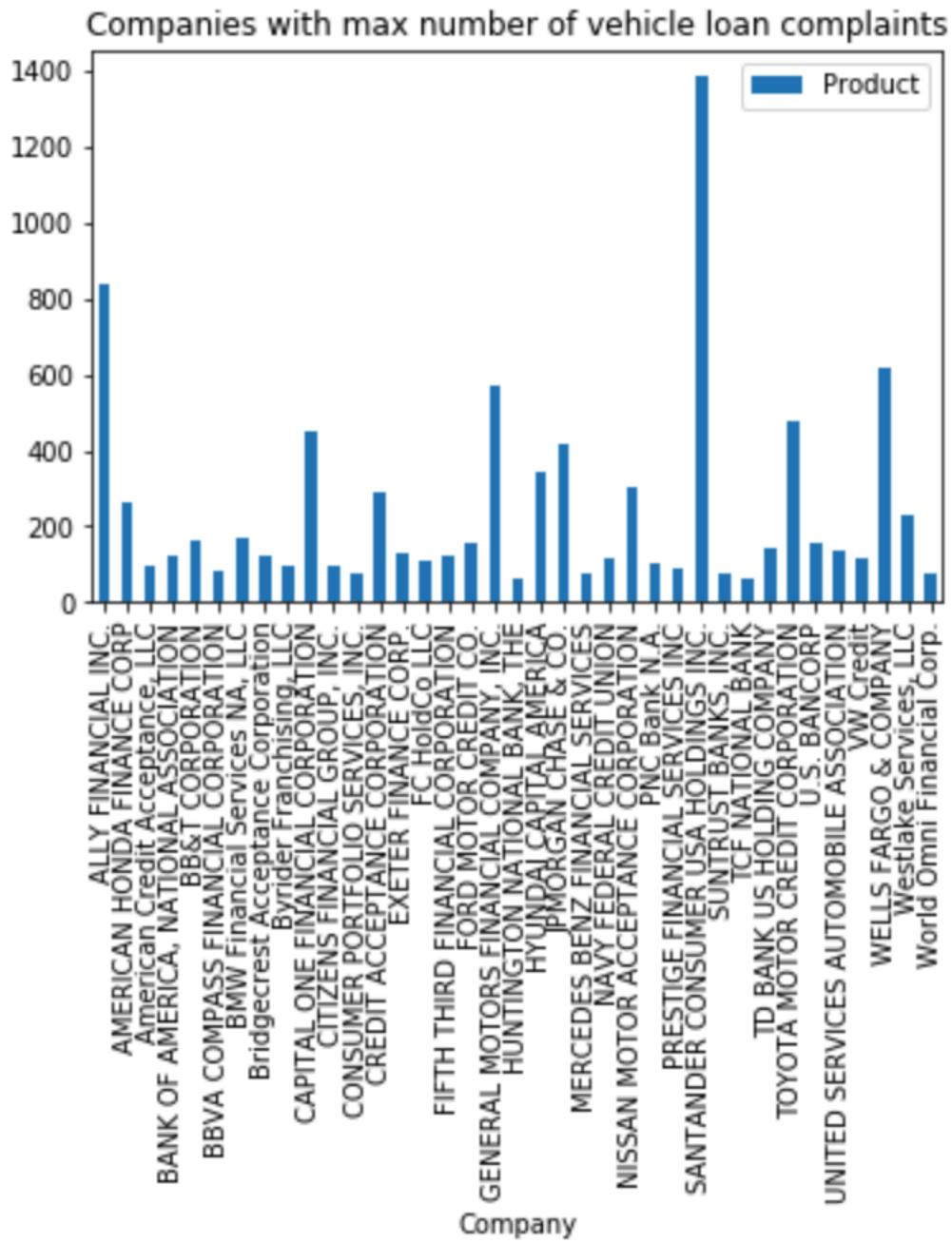
Analysis: From our analysis we found that there was a significant rise in the student loan from year 2015 to 2017. We also found that California, Georgia and Florida has the highest number of registered complaints.

3) States with a better public transportation system could have a lower number of vehicle loans.



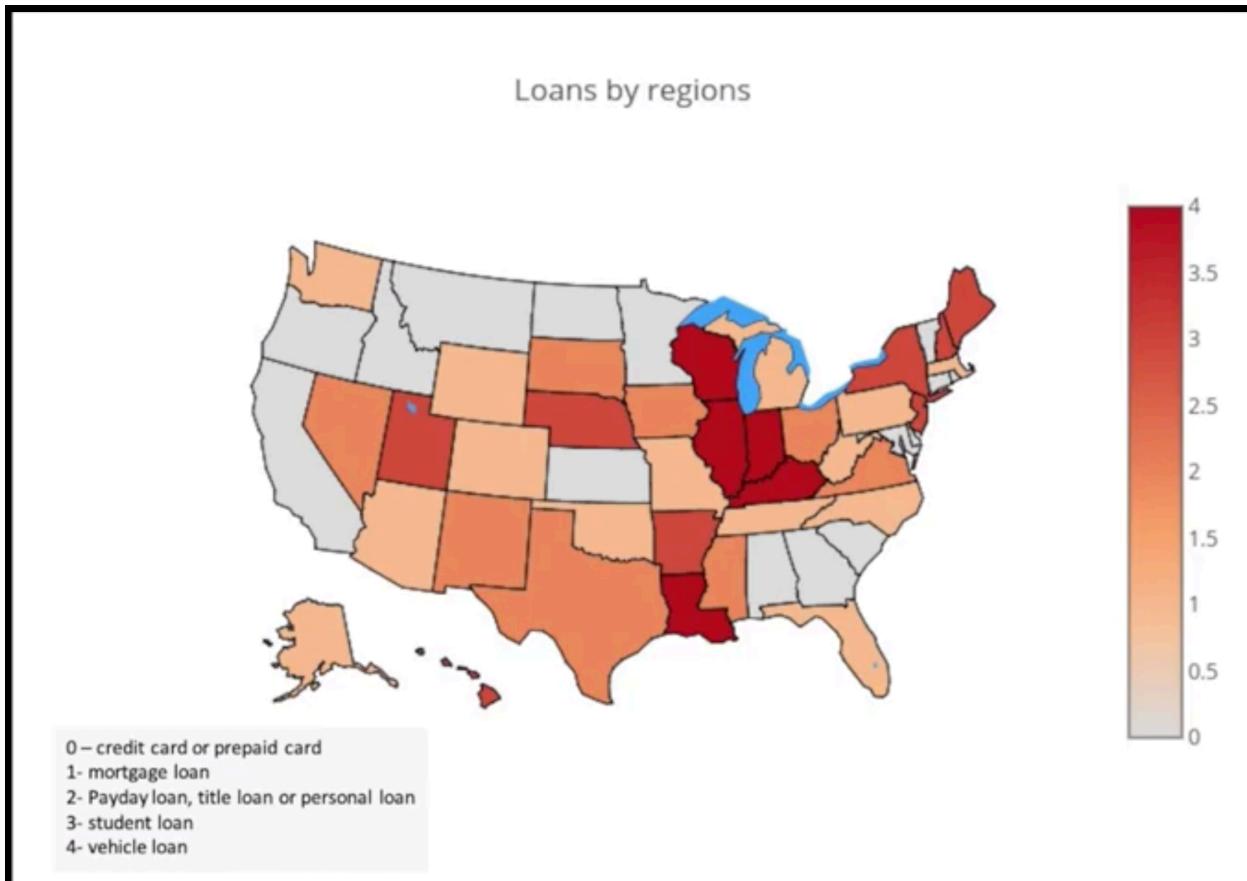
Analysis: According to our analysis the number of vehicle loans is independent of the public transport system. We did not find any relation between the quality of public transportation system in a state and number of vehicle loans. For most counties, approximately 10% of population prefers to commute by public transport.

4) Analysis of companies with highest number of vehicle loans;



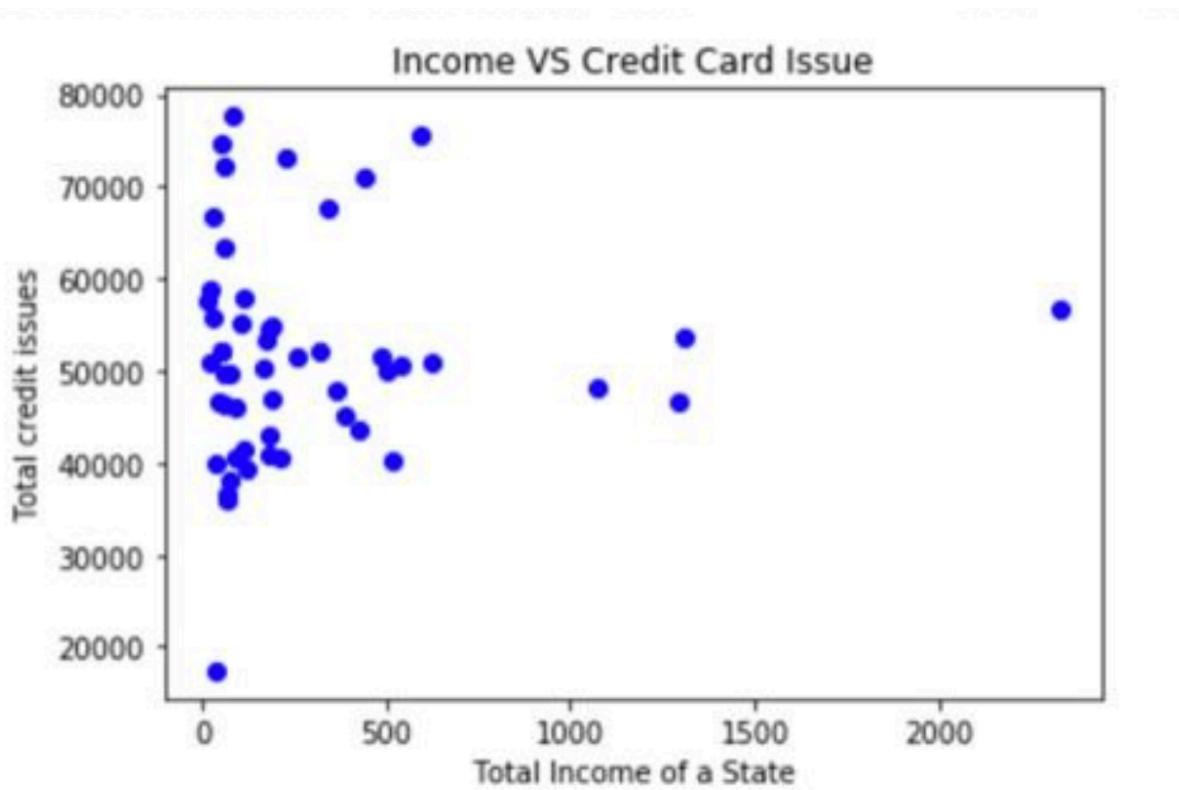
Analysis: According to our analysis Santander and Ally Financial received the highest number of complaints with respect to vehicle loans.

5) Analysis of loans by region:



Analysis: Loans related to Mortgage accounted for the highest number across the US and northern states accounted for highest number of credit card loans and Midwest accounted for highest number of vehicle related loans.

6) States with a higher income might have a higher number of credit card issues than other states.



Analysis: In our analysis, we found that people with lower tend to have higher number of credit card issues as people with lower income face difficulty with obtaining a credit card. This is in contradiction to our hypothesis. On further analysis, we explored the breakdown of the problems associated with credit card issues. Upon viewing those, we found that the number of problems stating the inability to get a credit card exceeded other problems like theft. This is the reason why states with low income showed a large number of credit card issues as it is difficult to get a credit card if you have a low income.

7) Table showing the data for different types of issues related to credit card:

Problem with a purchase shown on your statement	10777
Fees or interest	5988
Other features, terms, or problems	5951
Getting a credit card	4301
Problem when making payments	4268
Closing your account	3437
Advertising and marketing, including promotional offers	2869
Trouble using your card	1701
Incorrect information on your report	1625
Struggling to pay your bill	1076
Problem with a purchase or transfer	936
Trouble using the card	631
Unexpected or other fees	454
Problem with a credit reporting company's investigation into an existing problem	425
Problem getting a card or closing an account	331
Improper use of your report	253
Advertising	80
Credit monitoring or identity theft protection services	55
Unable to get your credit report or credit score	45
Problem with overdraft	17
Problem with fraud alerts or security freezes	12
Problem with credit report or credit score	6
Problem with an overdraft	2
Payoff process	1

Analysis: In our analysis, we found that Problem with the purchase on the statement accounted for the highest number.

8) Table below shows the response time of different companies as they resolve the issue:

Timely response?	No	Yes
Company		
CITIBANK, N.A.	1.0	6822.0
JPMORGAN CHASE & CO.	2.0	4999.0
BANK OF AMERICA, NATIONAL ASSOCIATION	4.0	3441.0
WELLS FARGO & COMPANY	68.0	1765.0
BARCLAYS BANK DELAWARE	1.0	1709.0
NETSPEND CORPORATION	2.0	488.0
Comerica	1.0	462.0
FIRST NATIONAL BANK OF OMAHA	1.0	239.0
KEYCORP	2.0	119.0
EQUIFAX, INC.	3.0	102.0
BB&T CORPORATION	1.0	55.0
TRANSUNION INTERMEDIATE HOLDINGS, INC.	1.0	51.0
SANTANDER BANK, NATIONAL ASSOCIATION	1.0	45.0
INCOMM HOLDINGS INC.	6.0	34.0
CARD Corporation	3.0	31.0
Atlanticus Services Corporation	45.0	27.0
BANK OF THE WEST	3.0	23.0
Empowerment Ventures, LLC	8.0	22.0
Google Compare Credit Cards Inc.	6.0	20.0
GreenSky, LLC	3.0	19.0
TIDEWATER FINANCE COMPANY, INC.	2.0	15.0
Colony Brands, Inc.	42.0	14.0
First Technology Federal Credit Union	2.0	11.0
BNY MELLON, NATIONAL ASSOCIATION	1.0	8.0
Affiliates Management Company	2.0	4.0
Alorica Inc.	1.0	2.0
Seed Consulting, LLC	1.0	2.0
Iron Capital Group	1.0	1.0
Riverwalk Financial Corporation	1.0	1.0
FS Card Inc.	1.0	1.0
COMMUNITY CHOICE FINANCIAL, INC.	1.0	1.0
APPLE FINANCIAL HOLDINGS, INC.	2.0	1.0

Analysis: We found that most companies resolved the issues in a timely manner with a few exceptions like Wells Fargo and Atlanticus Services which have the slowest response time.

Hypothesis Test:

- 1) States with a better public transportation system could have a lower number of vehicle loans. **Rejected – In our analysis we did not find any relation between number of vehicle loans and quality of public transport system.**

- 2) States with a higher income might have a higher number of credit card issues than other states as in those states, credit cards are issued to a larger number of people. **False – In our analysis we found that people with lower income tend to have more credit card related issues as they find it difficult to obtain credit card which is one of the major issue reported for credit cards.**