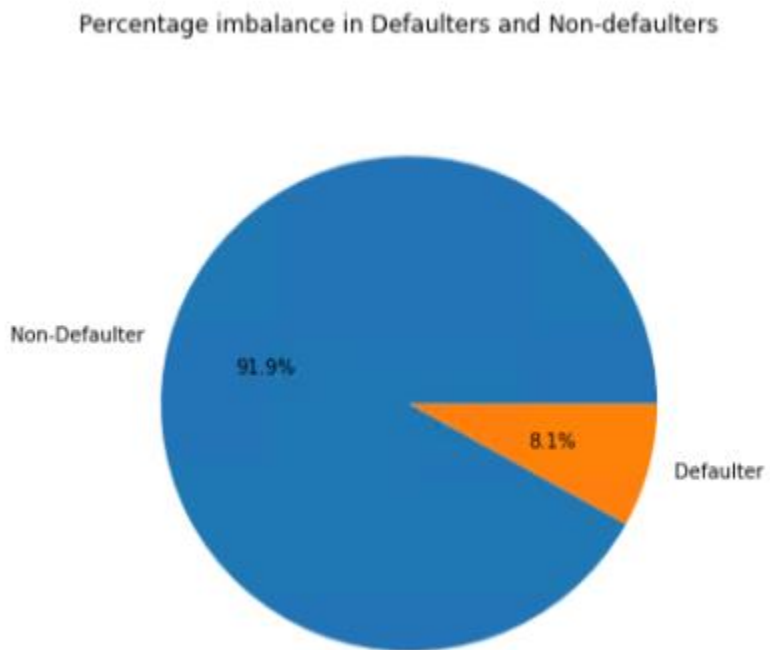
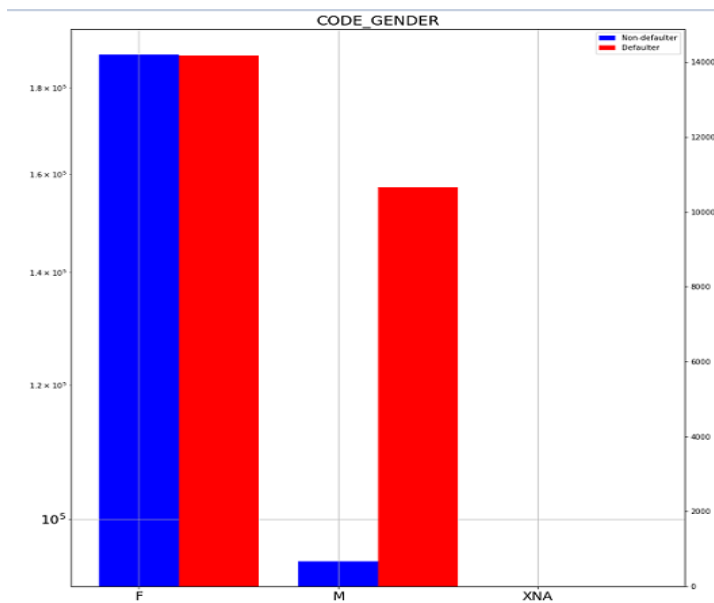


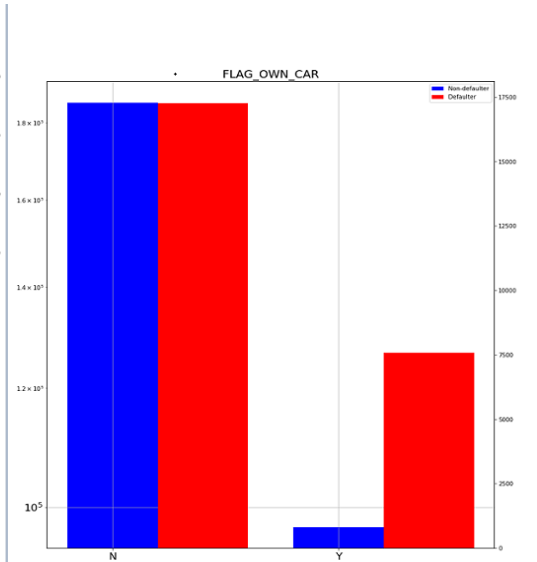
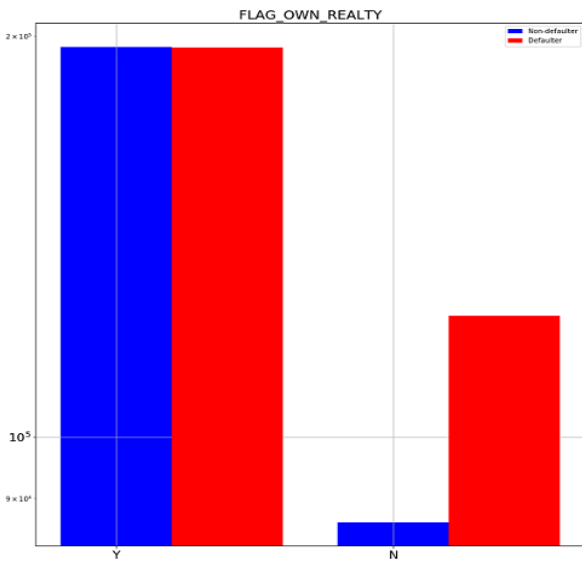
PERCENTAGE of Defaulters and Non-defaulters



UNIVARIATE ANALYSIS

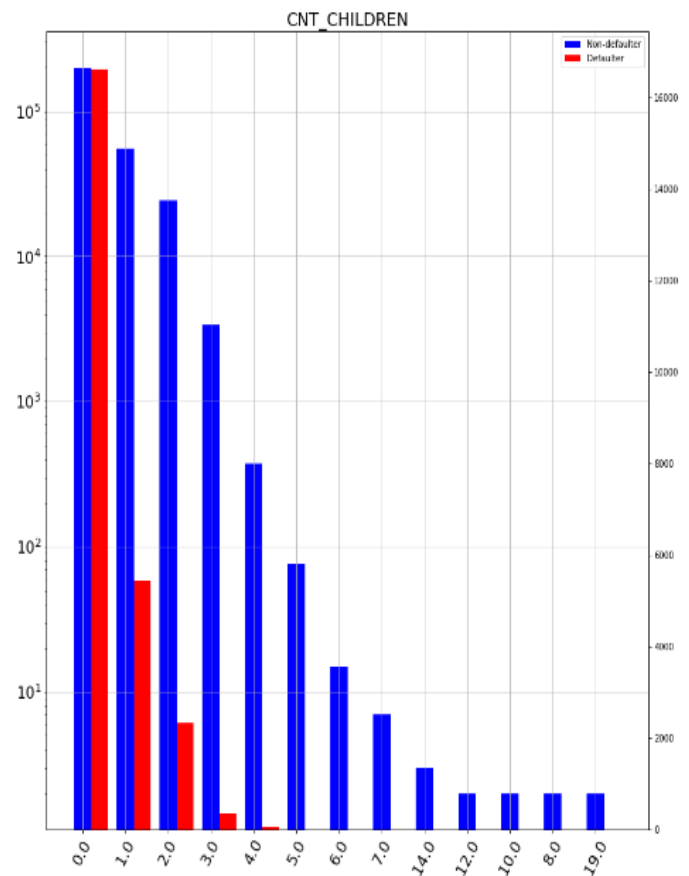
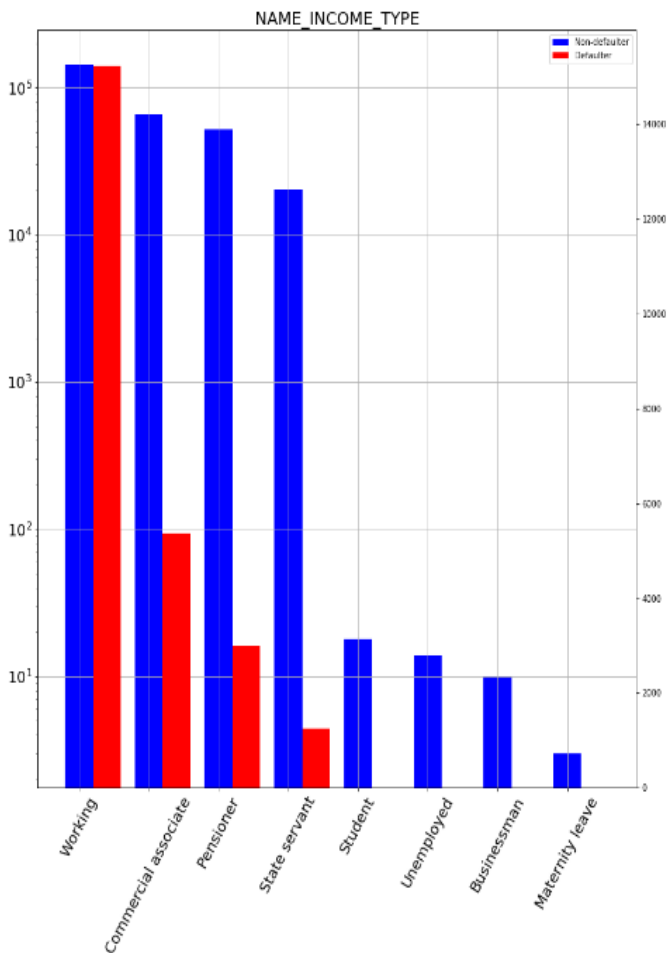


We notice that non-defaulters requests very few percentage is male, when it comes to defaulters, male form a huge percentage. So, males are not good candidates to provide loan.



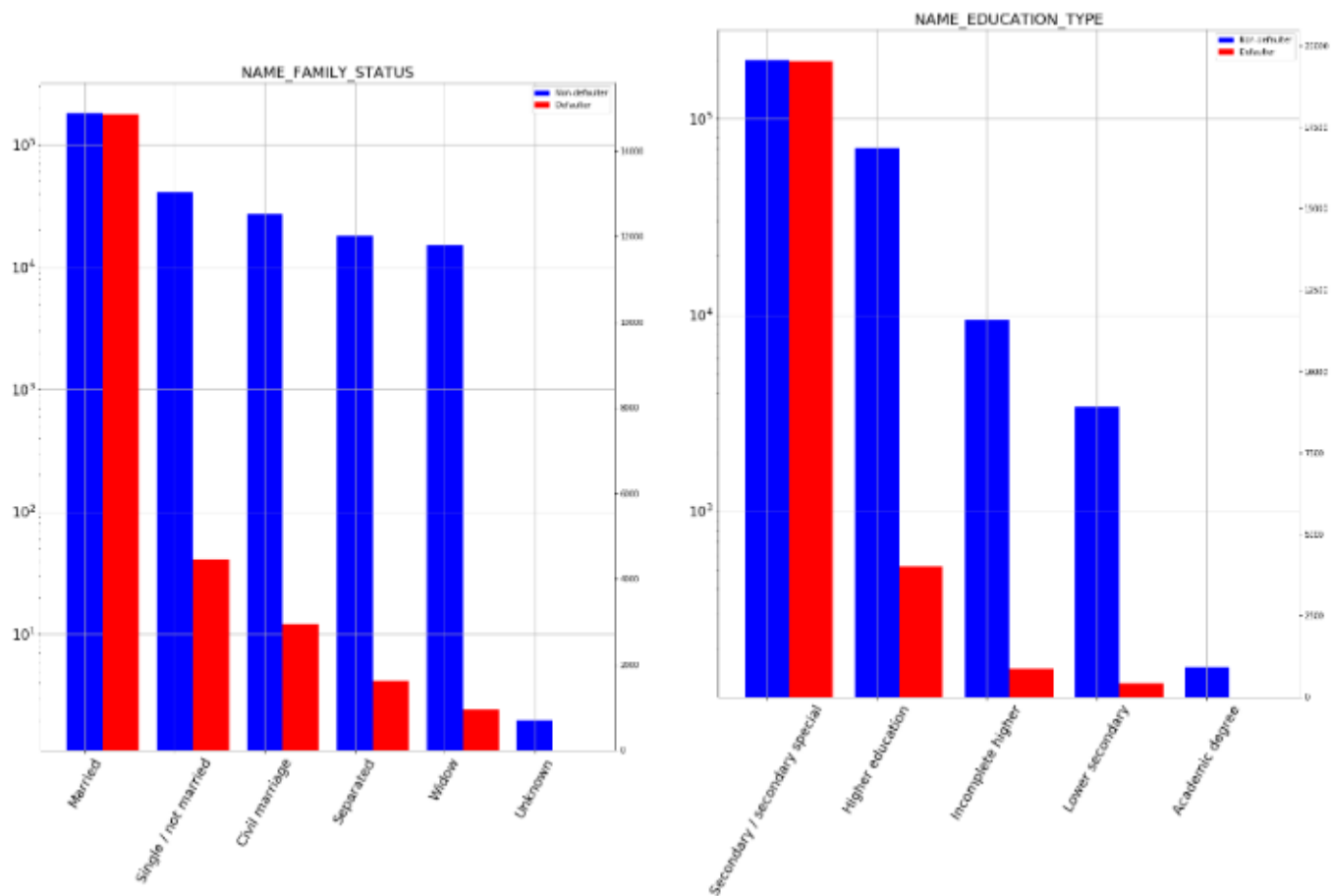
This graph shows that of the non-defaulters very few do not own a flat or house (less than 10%), but of the defaulters one-third are those who do not own flat or house.

Similarly for those who own car we notice that they tend to be more on defaulters list.



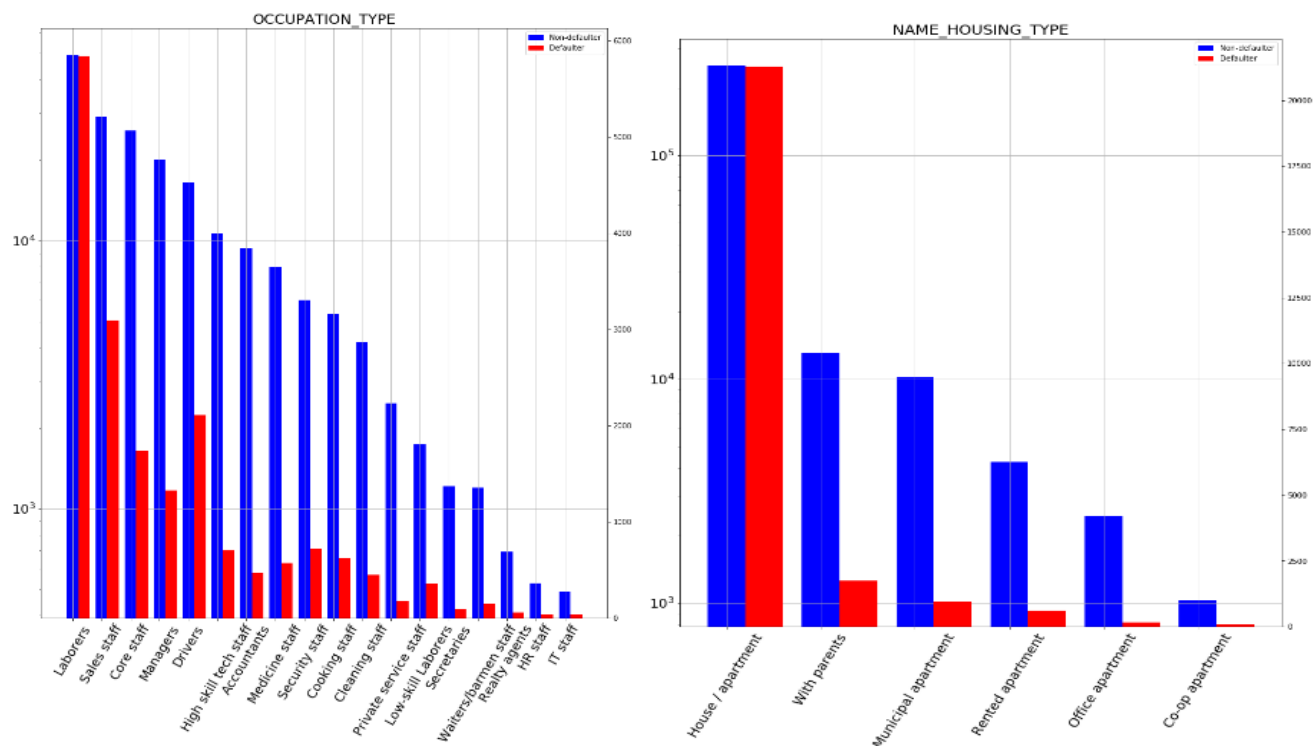
From graph we see that those with income type of Students, unemployed, businessman and maternity leave, tend to never be on defaulter list while working tends to contribute to a huge percent on defaulter list.

Those who have no children tend to be on defaulter list. As the count of children increases the possibility of being on defaulter list reduces drastically.

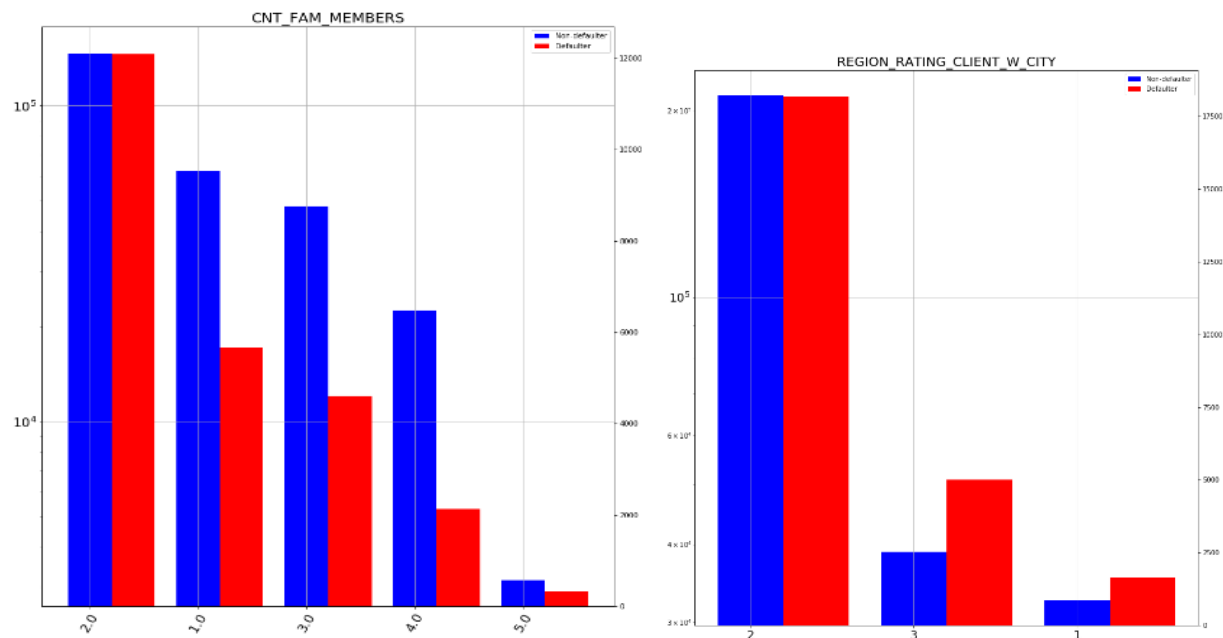


In family status, married people tend to be more on defaulter list as compared to others. Widows, Separated, civil marriage, Single/not married tend to have less chance of being on defaulters list.

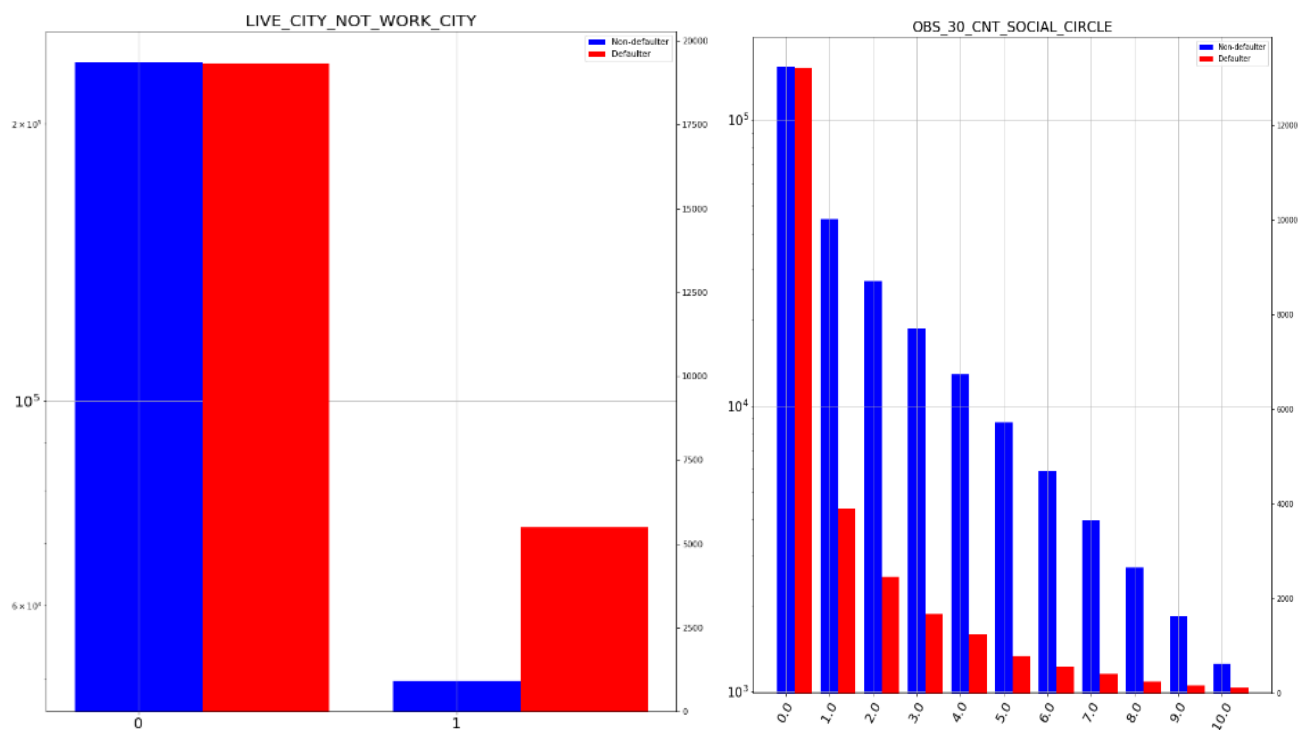
In education type, secondary/secondary special tends to be of highest number in defaulter list while Incomplete higher, lower secondary and academic degree appear least on defaulter list.



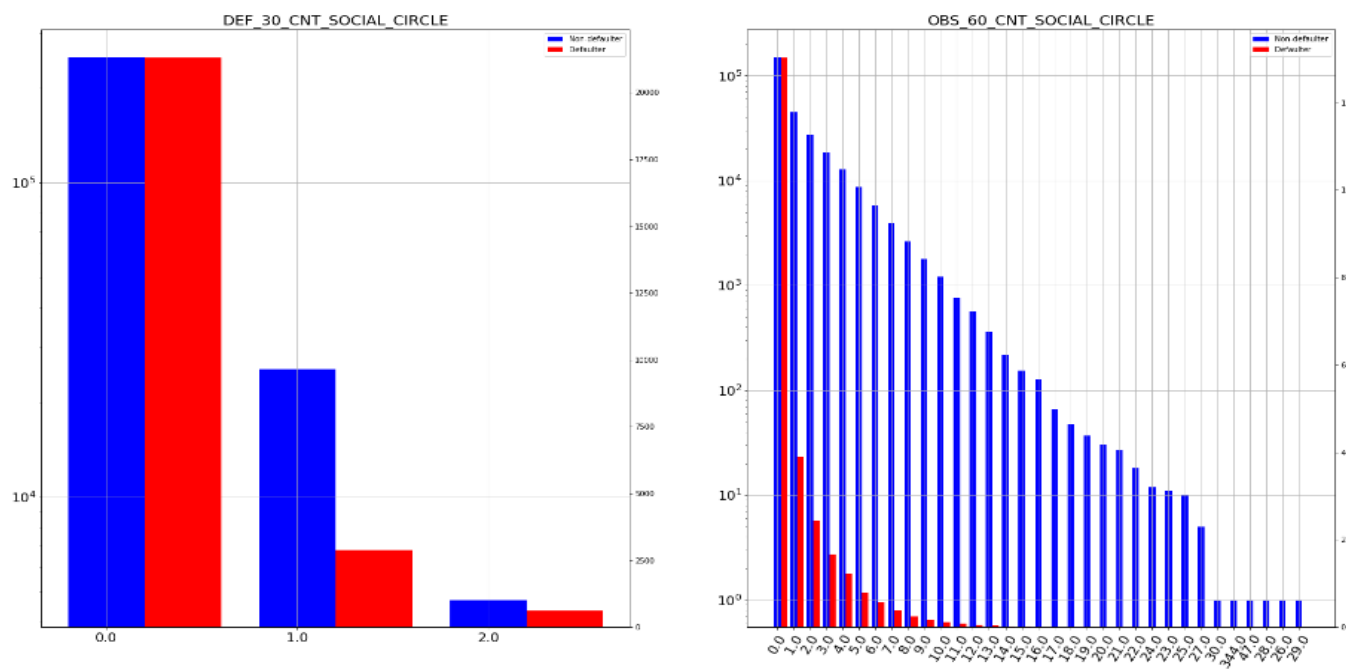
Although Laborers, Sales staff, Core staff occupation type have requested for loan in huge numbers, defaulters consists of laborers in huge number with sales staff and drivers being next on list. High skill staff, accountant, medicine staff, security staff,cooking staff, cleaning staff tend to be on lower side on defaulter list.

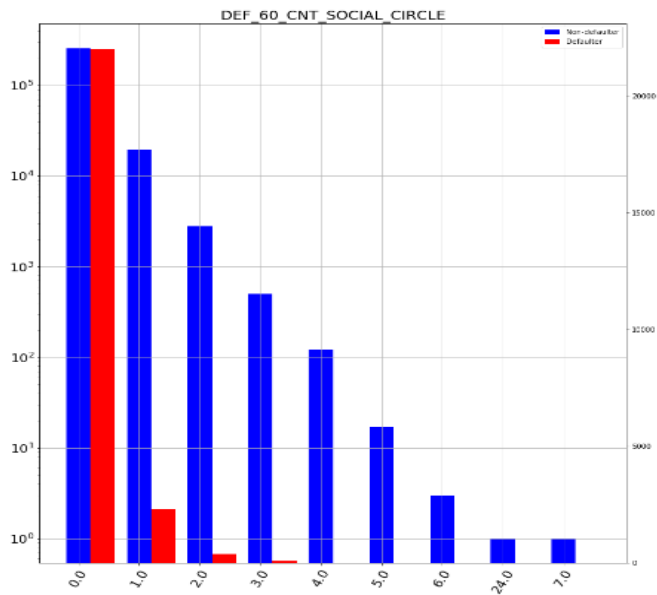


As count of family members increases, the person tends to be less on defaulter list. When taking rating of region with taking city into account, very less of the requestors are non-defaulters for rating 3 and 1, but they contribute more in defaulters list.

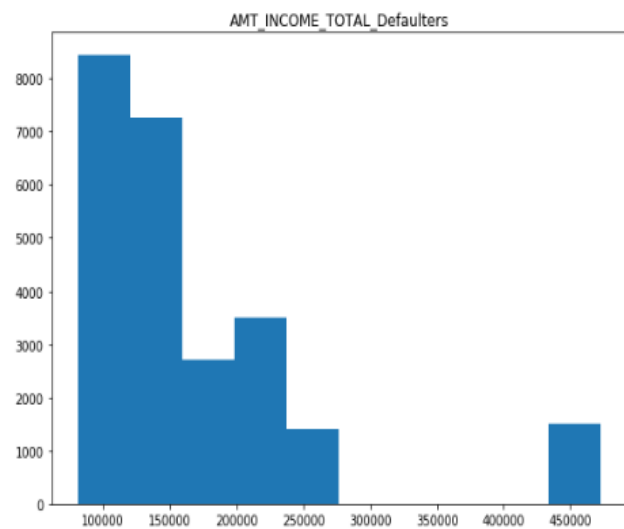
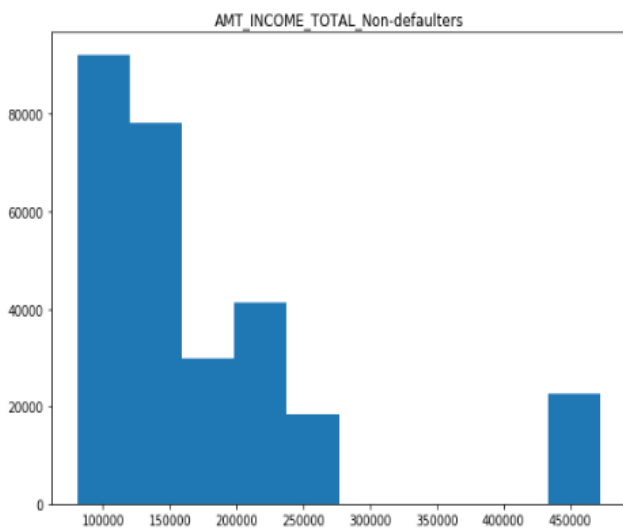


If requestors' contact address city tends to not be same as work city, then they tend to be in defaulters list more than non-defaulters list. If observation of client's social surroundings with observable 30 DPD(days past due) is 0, then the chance of the client becoming a defaulter is more.

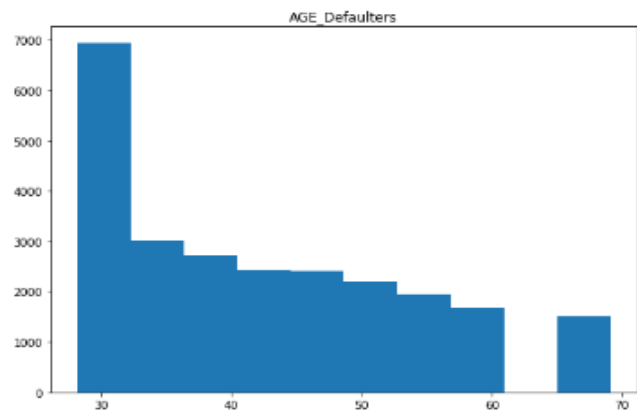
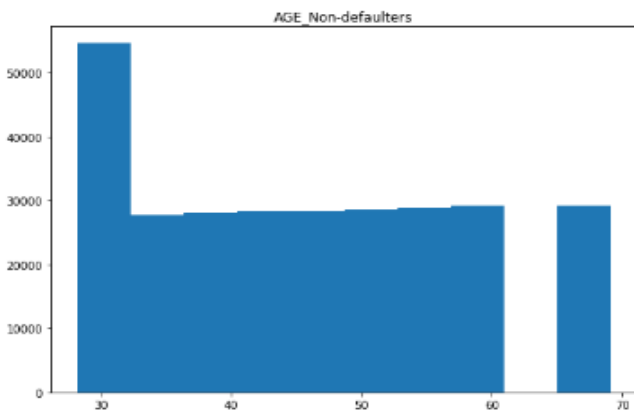




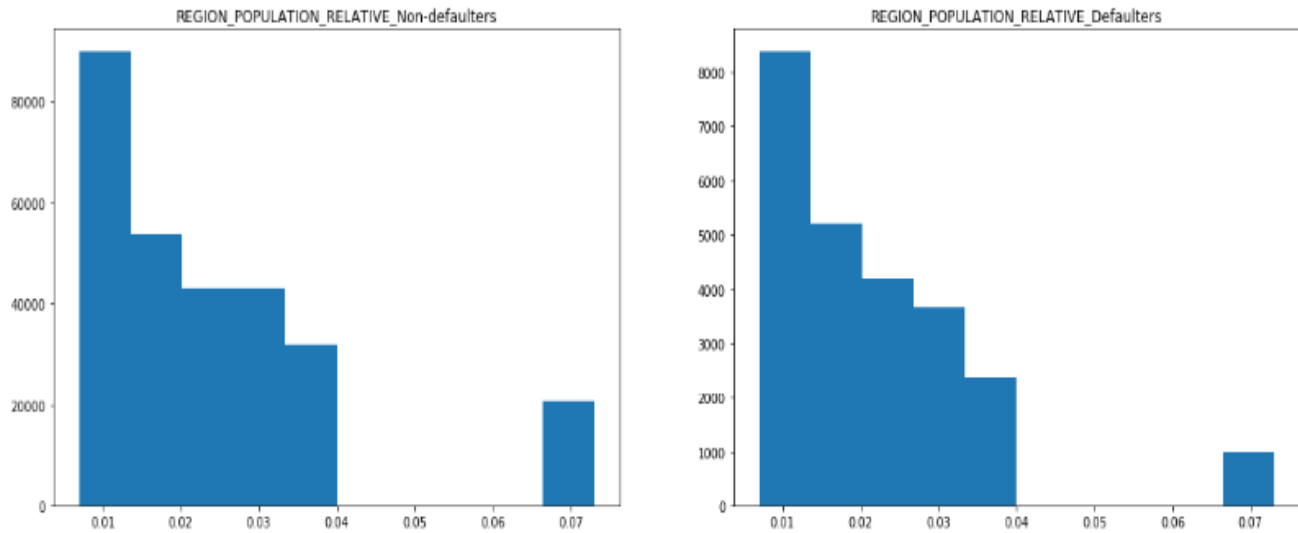
In all the above graphs we notice that when observation count is 0, the chance of being a defaulter is much much higher than 1 and above.



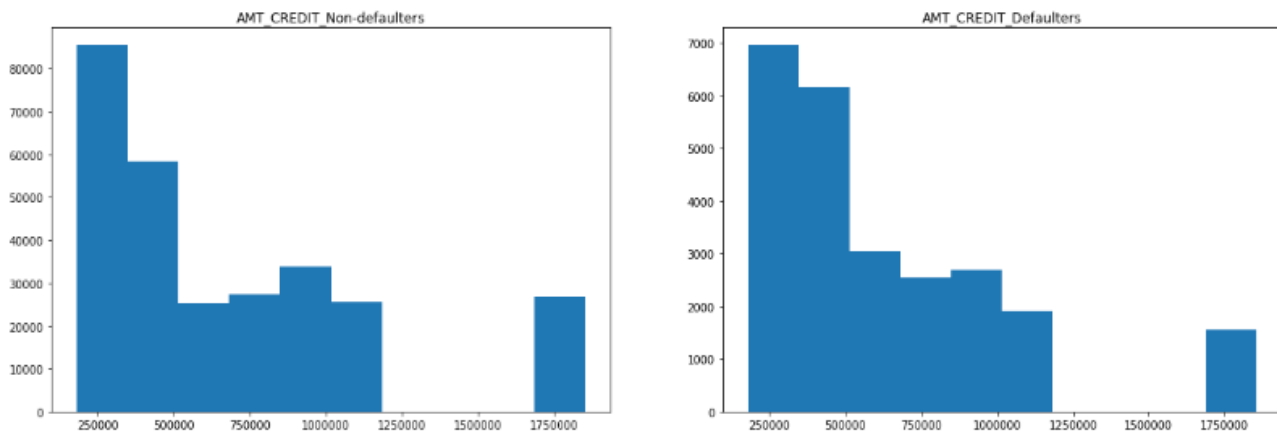
There seems to be no significant influence on defaulter pattern based on total income.



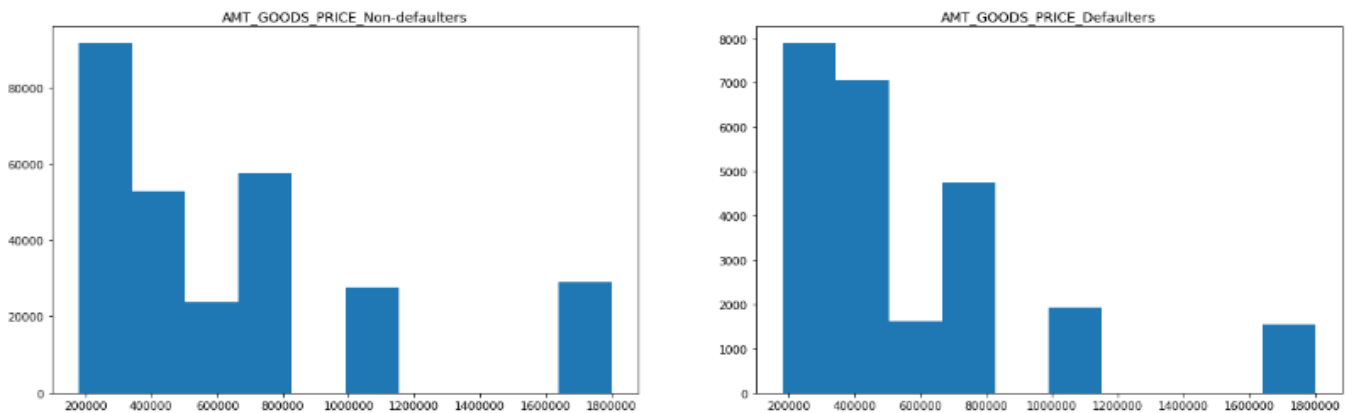
Here we notice that most of the population for defaulters and non-defaulters put together are in age range 28-32. As age increases, the percentage of defaulter count reduces



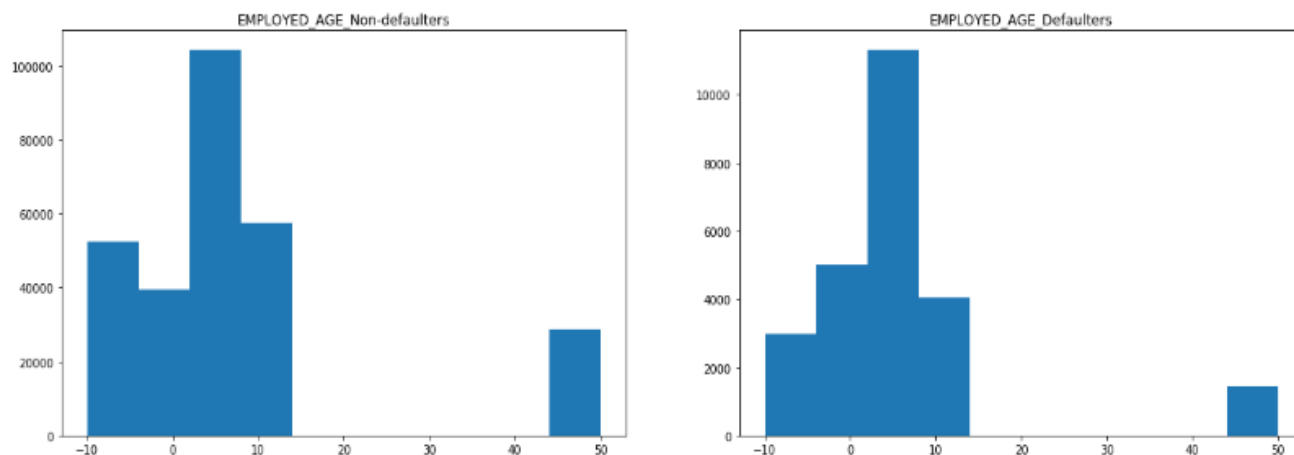
Those who live in more populated area tend to be less on defaulter list. For less populated area, the client tends to be more on defaulter list.



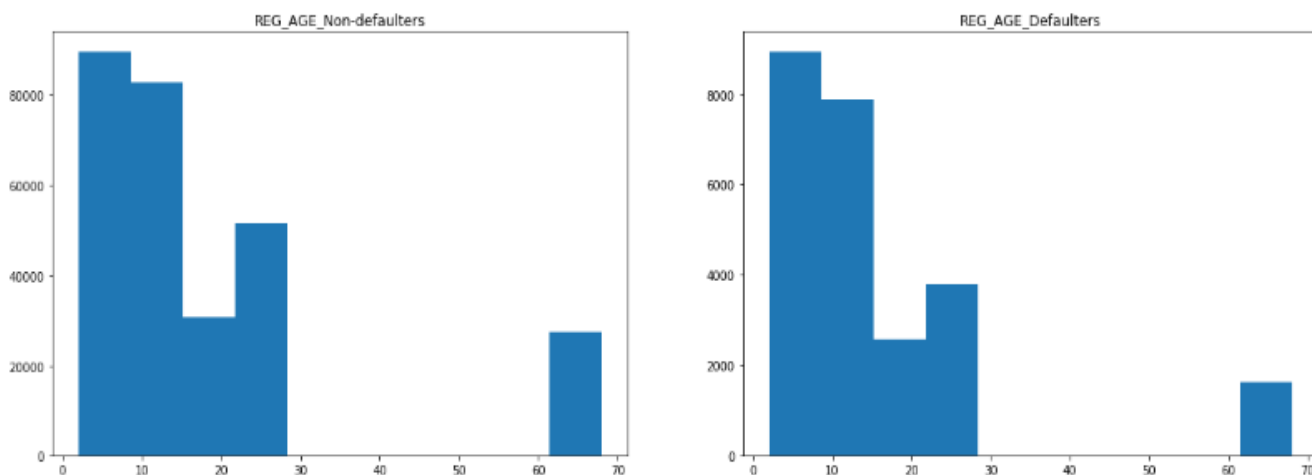
Considering that those given credit amount in range 250,000-500,000 tends to be on defaulter list more with 330,000-500,000 having more percentage in comparison to the total population



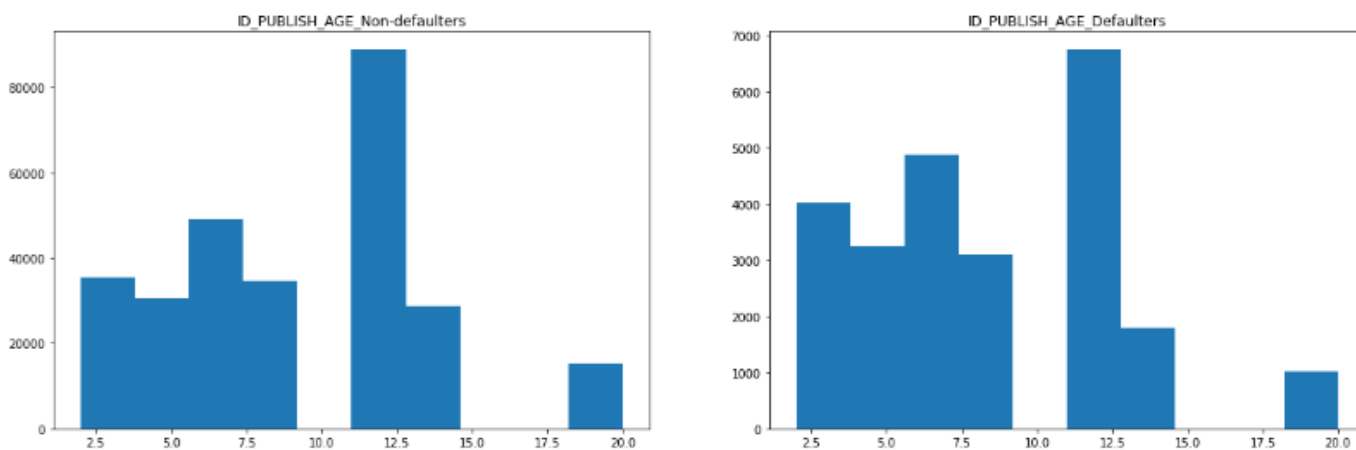
We see a similar correlation in consumer loans that is for loans where goods price is between 300000 and 500000, tops the defaulter list in terms of total population in defaulters and non-defaulters



Unemployed (Employed_Age<0) is less in defaulters list. Those who have worked for 4-8 years top the defaulters list. Those showing as 45-50 have least chance of being in defaulters list.

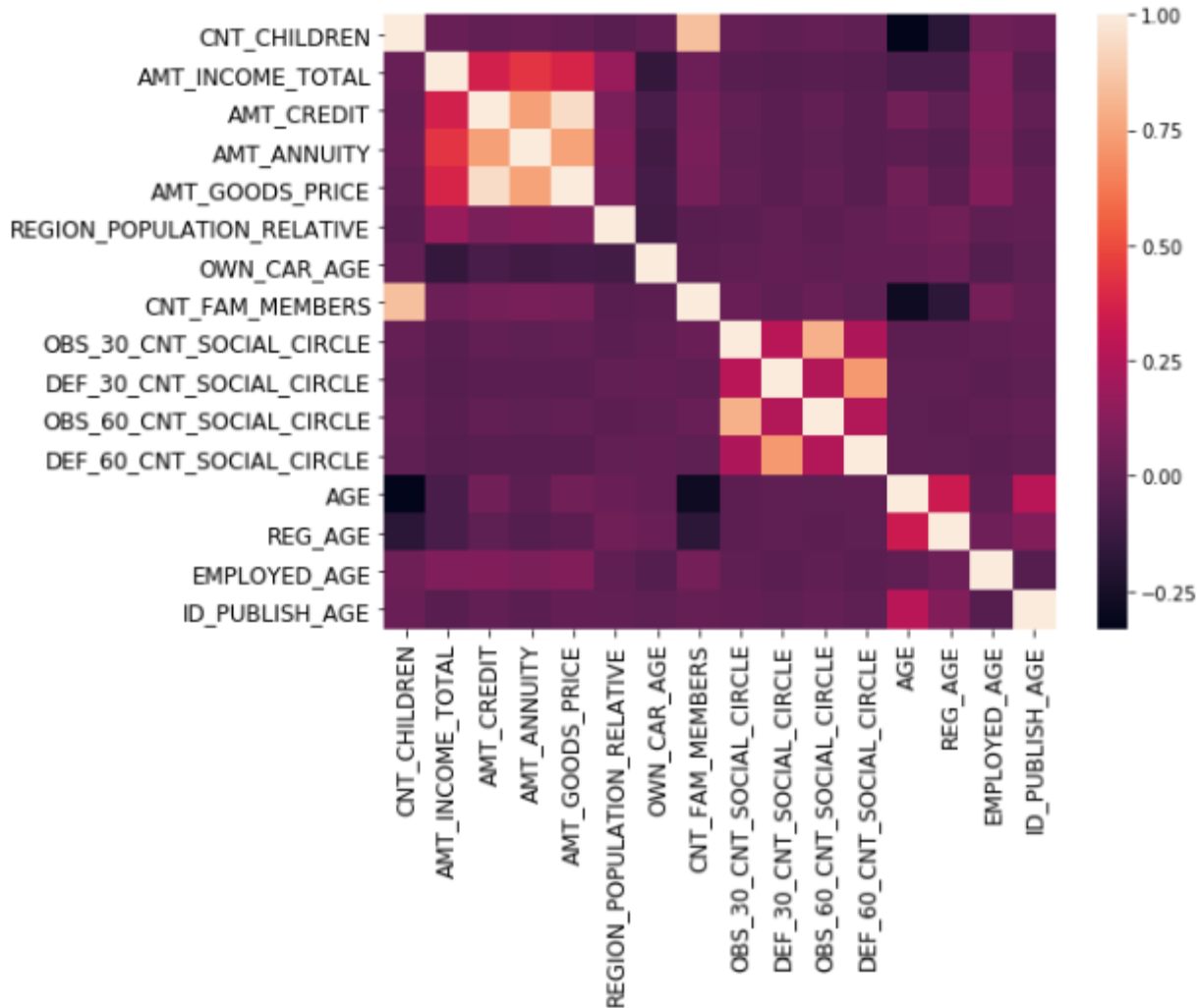


Clients who changed their registration 22 years and back are less in defaulter list



Clients who changed their ID document 1.5-7 years ago are less in defaulter list as compared to greater than 7 years.

Correlation of the numerical values



Age of person is negatively correlated with Count of Children and Count of Family members which means younger person will have family members and children with more responsibility. From earlier graph, we can see that where count of children is zero, client tend to be more in defaulter list. Where count of family members is two, client is more on defaulter list.

We find very high positive correlation between count of family members and count of children. More the number of children, lesser the family income. Families with 2 members and 0 children are bound to be on defaulter list.

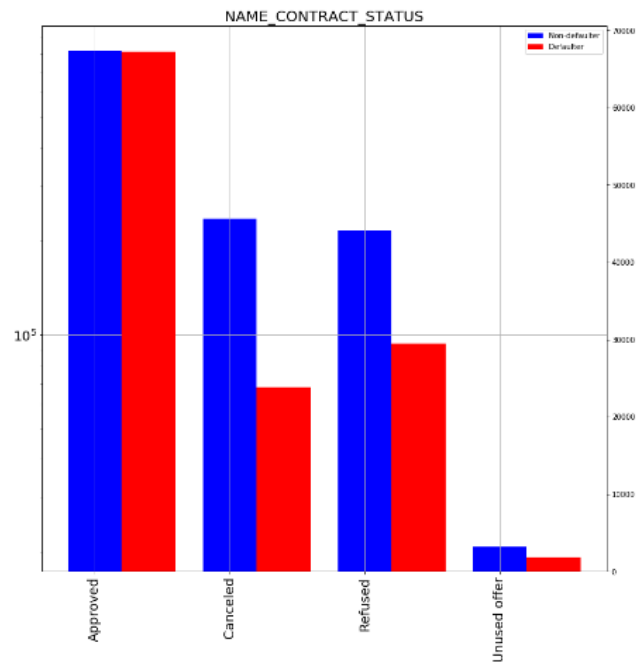
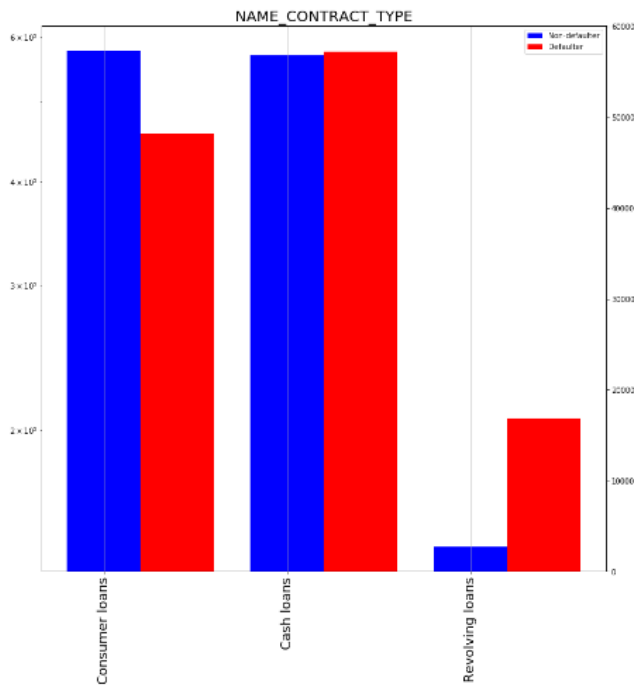
There is high correlation between observable count of 30 days past due and observable count of 60 days past due. As pointed out earlier for defaulter both the values are high with count of 0. So if count is 1 or more, the chance of client becoming defaulter is less.

There is high correlation between defaulted count of 30 days past due and defaulted count of 60 days past due. As pointed out earlier for defaulter both the values are high with count of 0. So if count is 1 or more, the chance of client becoming defaulter is less.

There is very high positive correlation for amount of goods for consumer loans and amount required as credit. So client will apply full loan of the goods instead of partial amount. More the amount credit, more the defaulters as seen in univariate analysis.

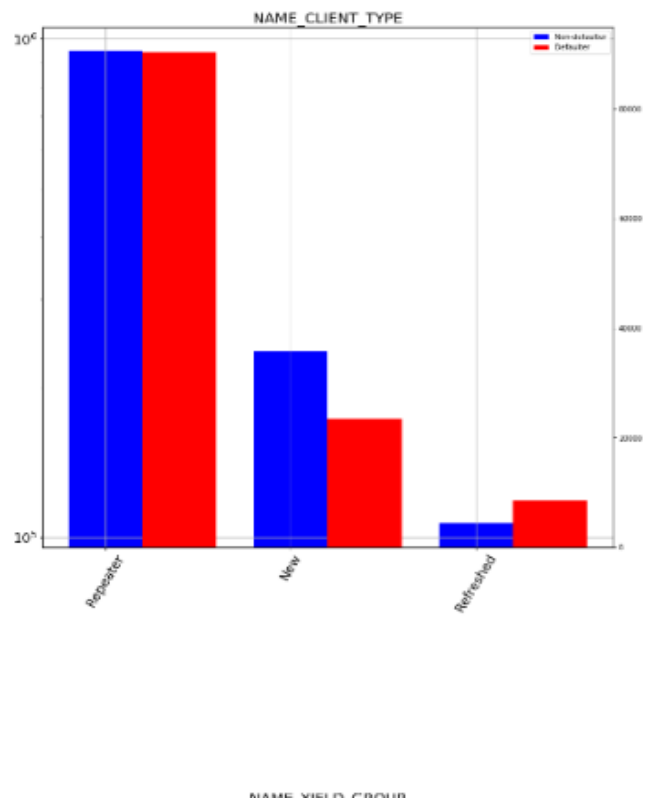
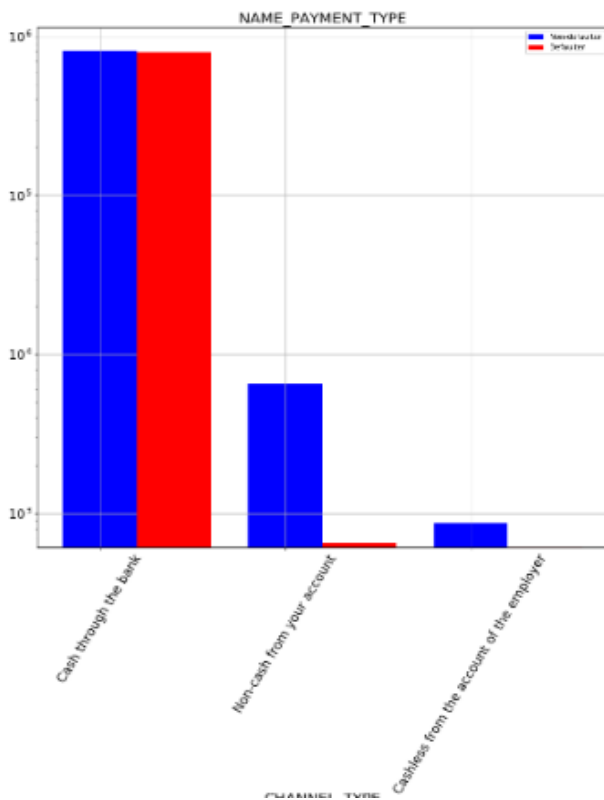
There is slight positive correlation between client staying in populated area and income. If person stays in highly populated area then income is low. Lower income clients tend to be defaulters.

Inference from previous application



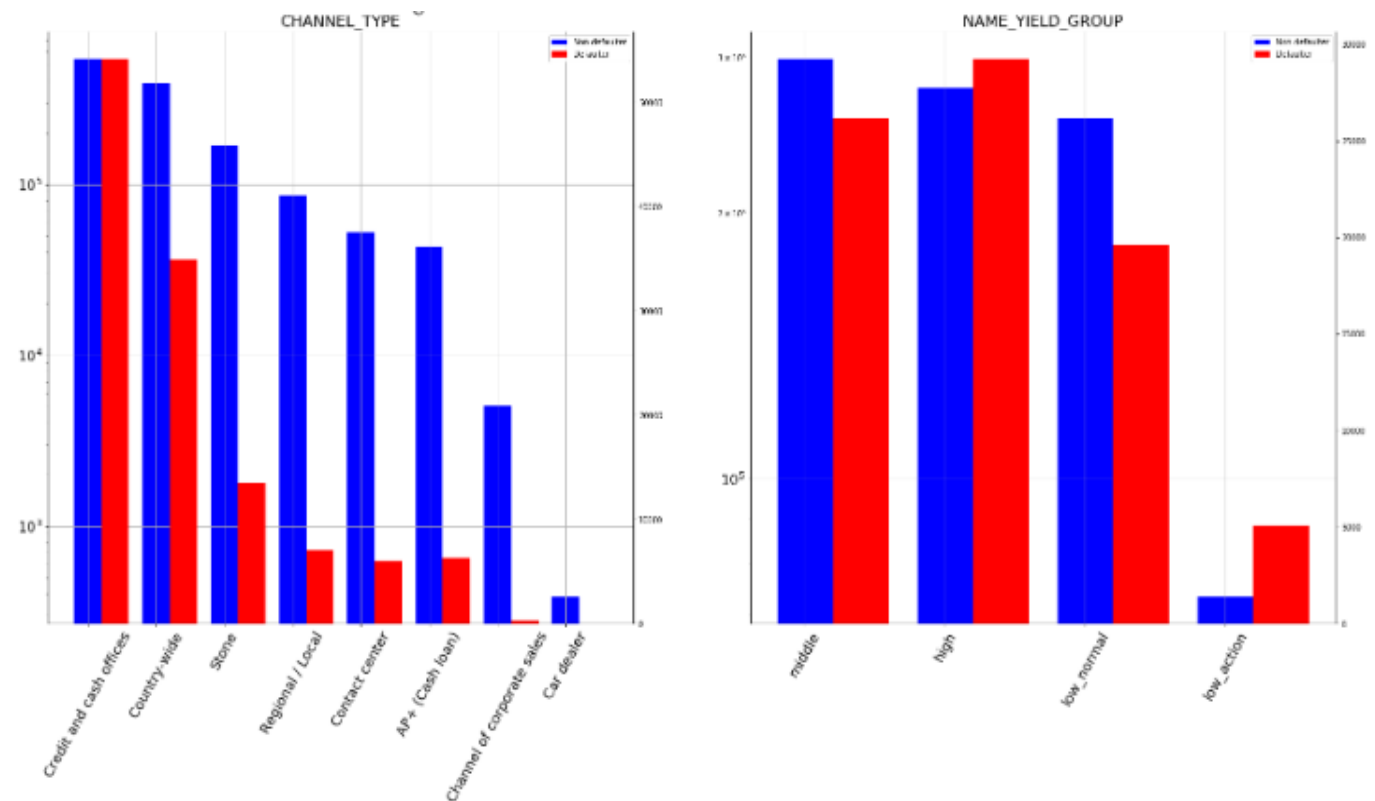
This time whoever are defaulter for revolving loan is more compared to non-defaulter revolving loan.

Of the application applied last time, defaulters are mostly those which were approved and least is who unused.



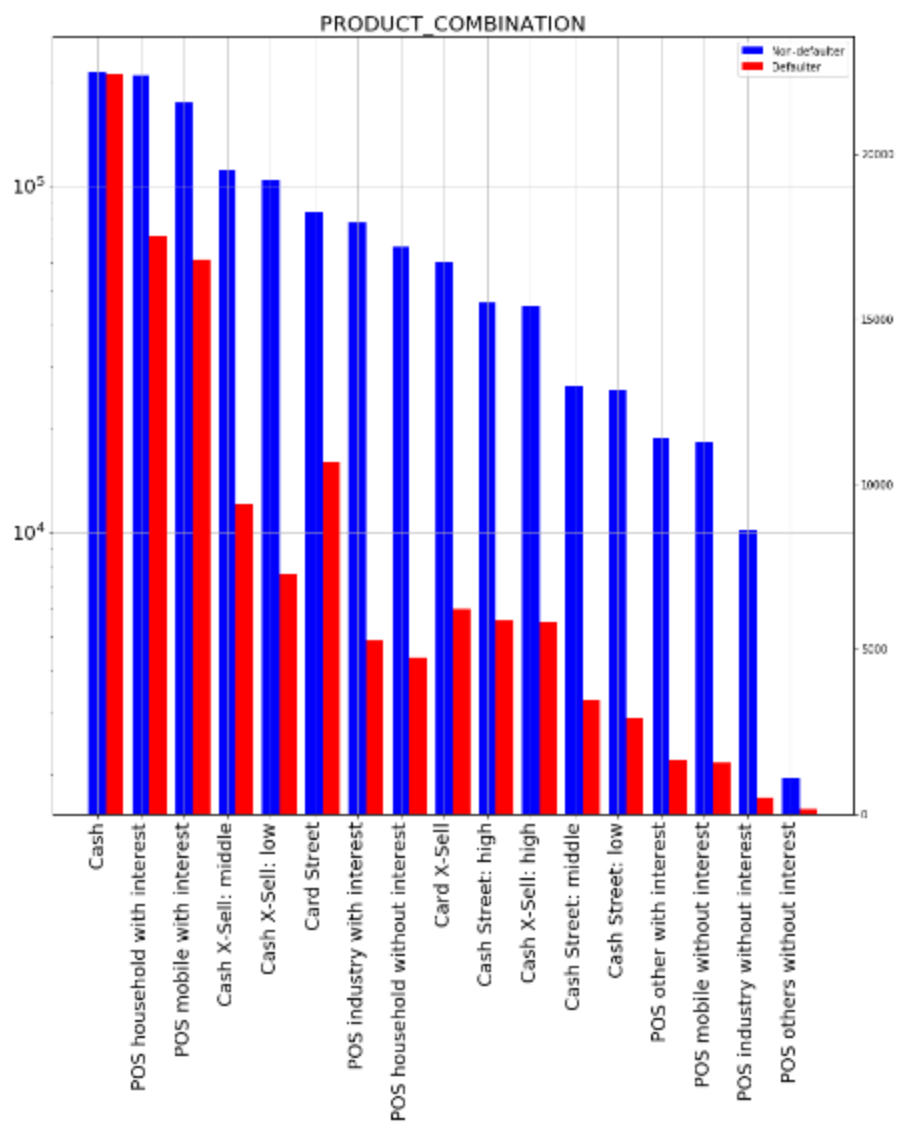
Those who chose to pay cash through bank in previous application are more than 90% on defaulter list.

If client was repeater in previous application, chance is he is a defaulter this time.



Where client is acquired through credit and cash offices and country-wide, the defaulters are more.

Group where interest rate was high and middle in previous application has defaulted more. Of the few that were given low_action, more percentage defaulted this time.



Where product combination is cash, POS household with interest, POS mobile with interest, Card Street Cash X-Sell: middle make up most of the defaulters where as other combinations are less defaulted.