LENDING CLUB CASE STUDY

SUBMISSION

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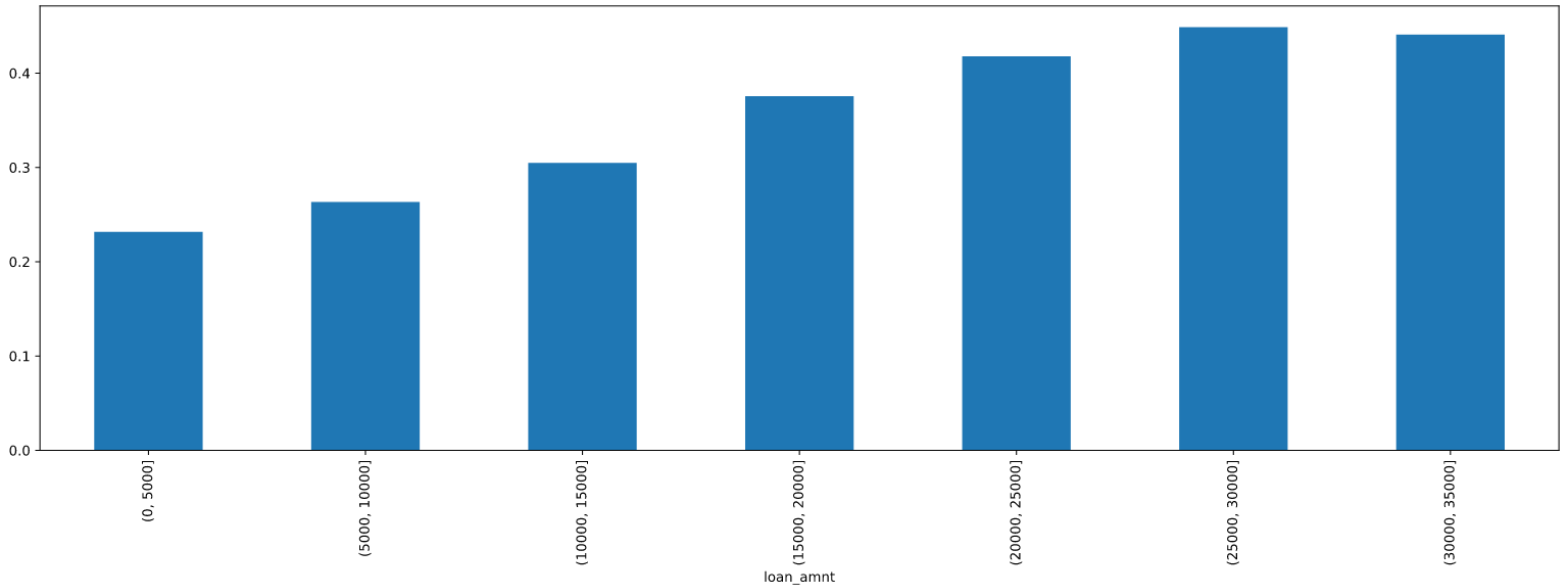
ABSTRACT:-

An Analysis to understand the driving factors behind Loan Defaults.

<Problem solving methodology>

- Understanding business objectives
- Investigating dataset ,on what attributes has been provided and meaning of each one of it.
- Optimizing the Datasets specific to business questions
- Performing analysis on optimized dataset
- Presenting data visually to make it more understandable

Loan Amount Analysis

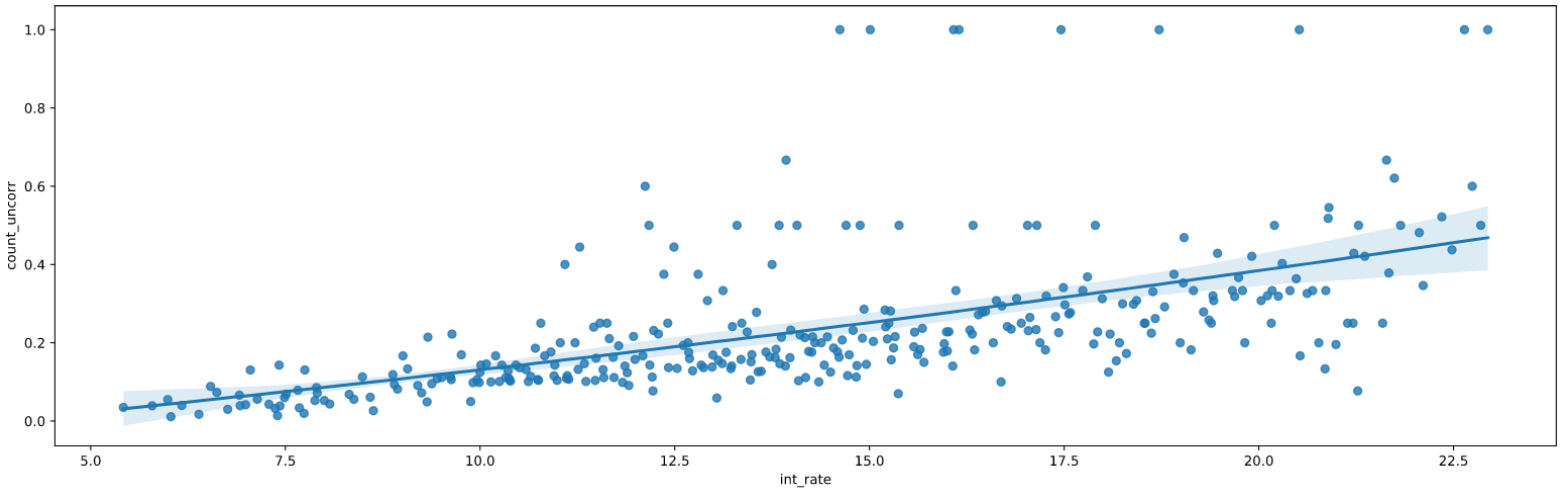


Result Summary:-

Loan Default rate increases with increase in Loan Amount.

Note:- y axis correspond to defaulted loan that has been normalized to vary between 0 and 1.

Interest Rate Analysis

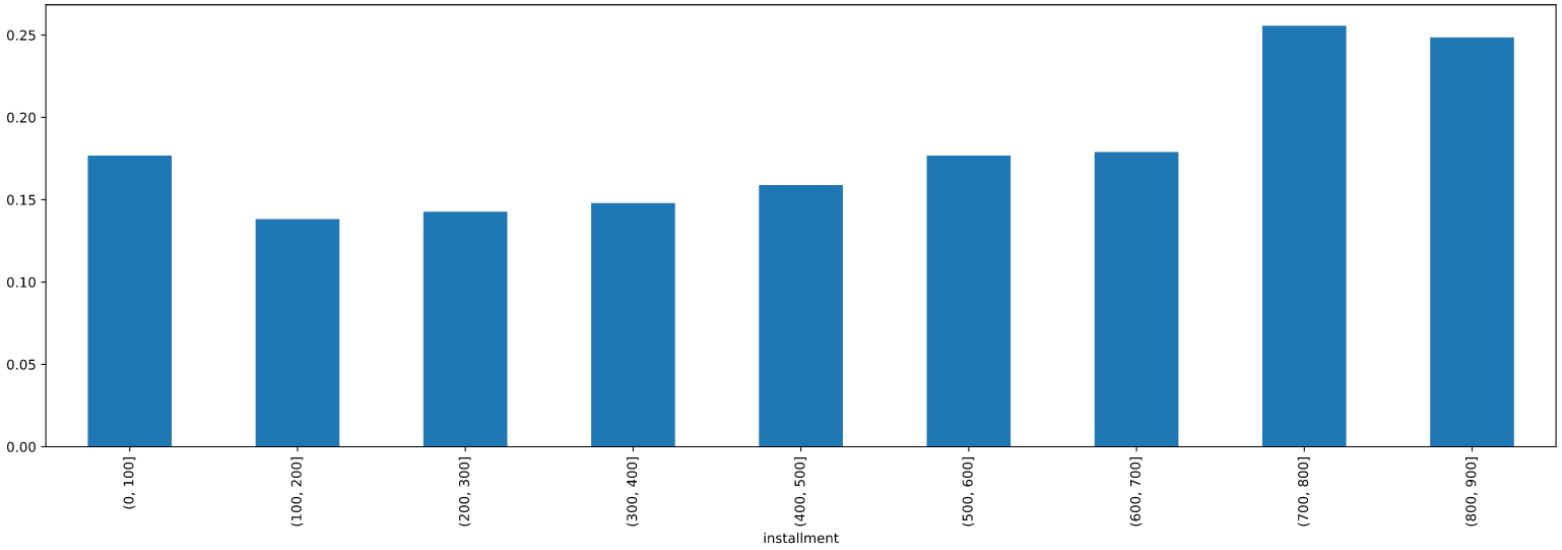


Result Summary:-

Loan Default Rate increases with increase in Interest Rate.

Note:- y axis correspond to defaulted loan that has been normalized to vary between 0 and 1.

Installment Analysis

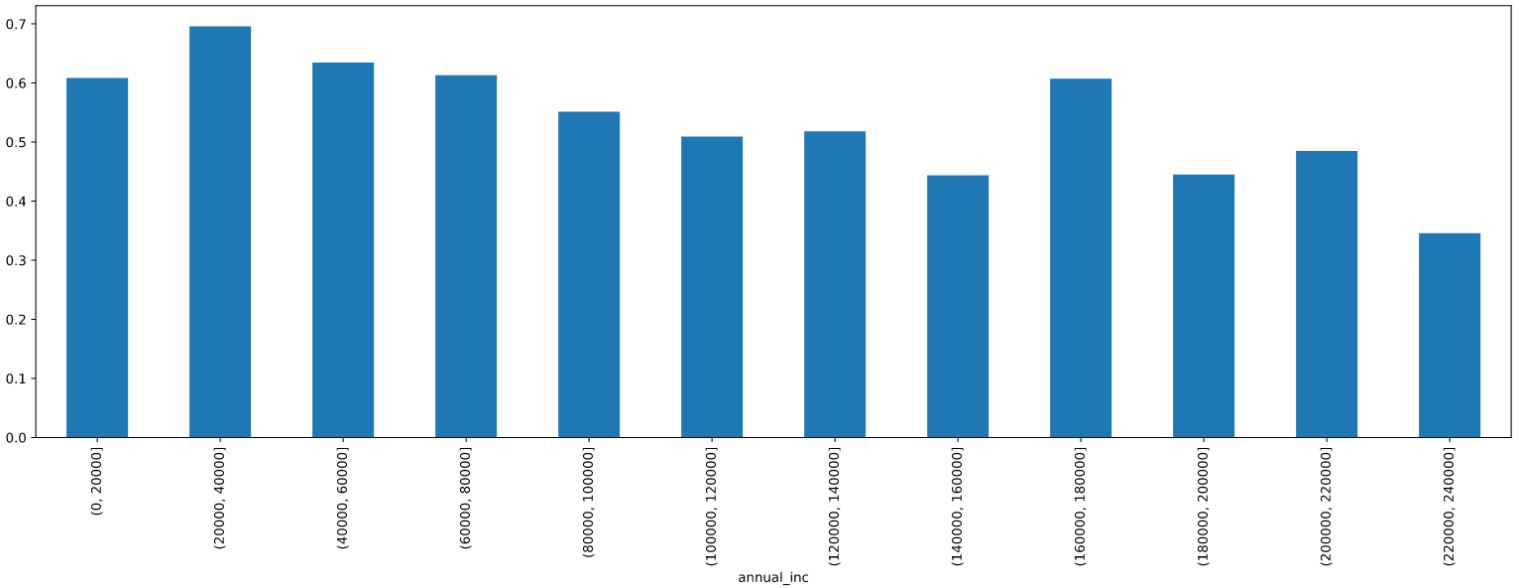


Result Summary:-

Loan Default rate slightly increases with increase in installment amount and starts spiking at installment amount greater than 700.

Note:- y axis correspond to defaulted loan that has been normalized to vary between 0 and 1.

Annual Income Analysis

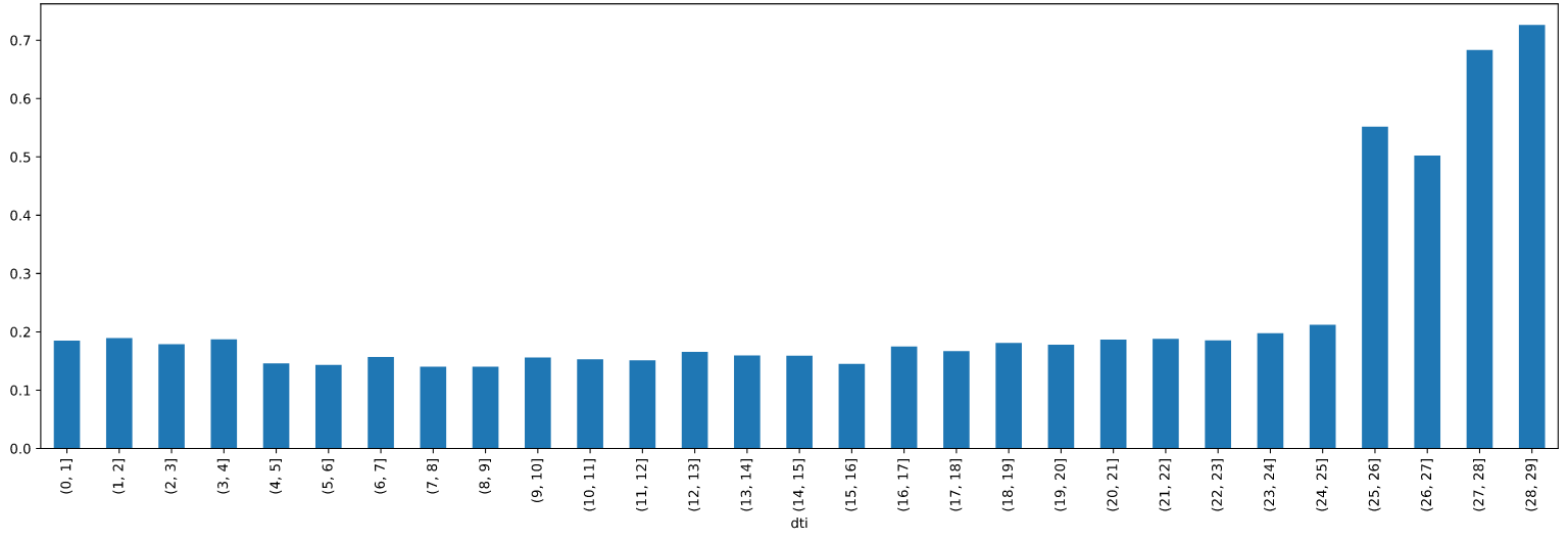


Result Summary:-

Default Loan rate generally decreases with in increase in annual income with few exceptions.

Note:- y axis correspond to defaulted loan that has been normalized to vary between 0 and 1.

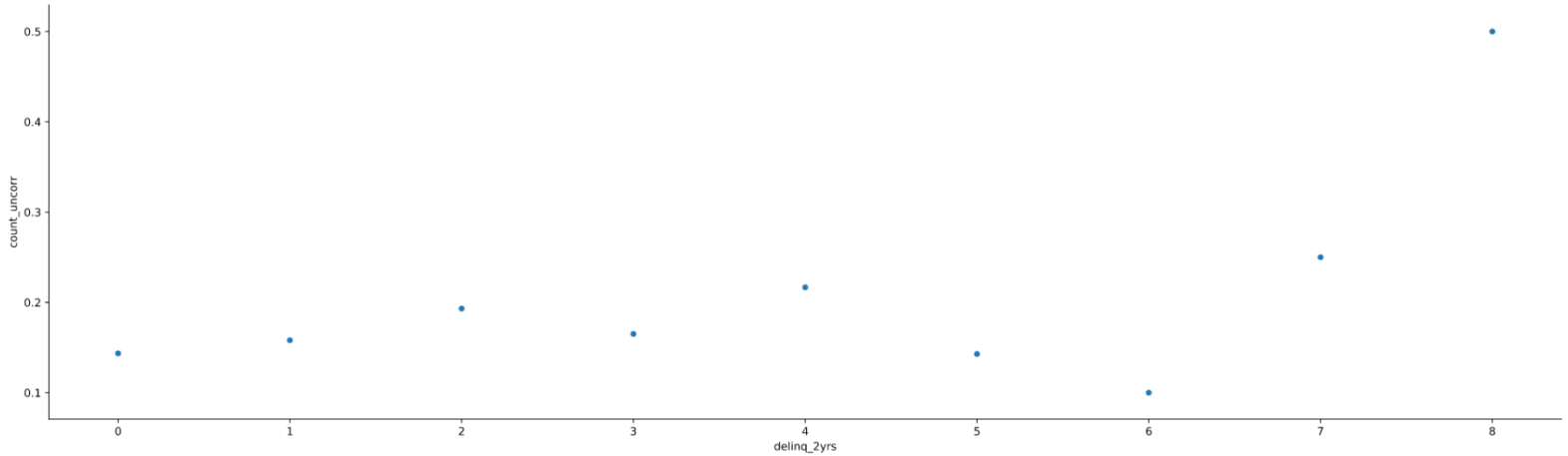
dti Analysis



Result Summary:-

Note:- y axis correspond to defaulted loan that has been normalized to vary between 0 and 1.

Delinquency in 2yrs Analysis

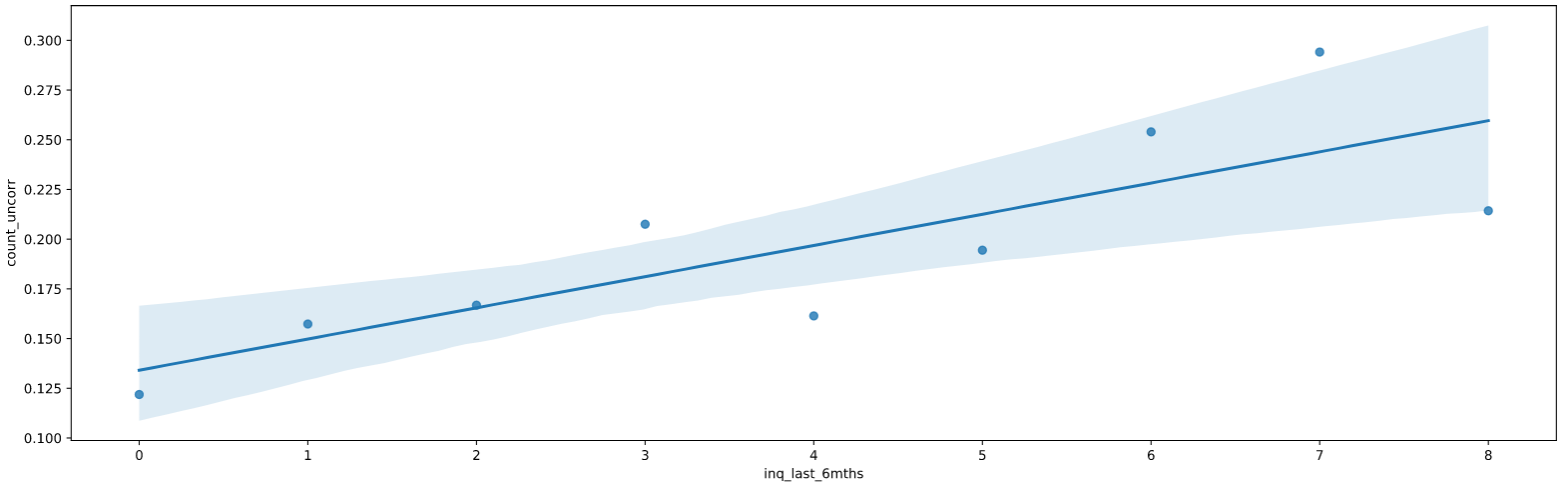


Result Summary:-

Loan Default rate and Deliquency has positive relationship after deliquency count of 6.

Note:- y axis correspond to defaulted loan that has been normalized to vary between 0 and 1.

Total enquiry in last 6 months Analysis

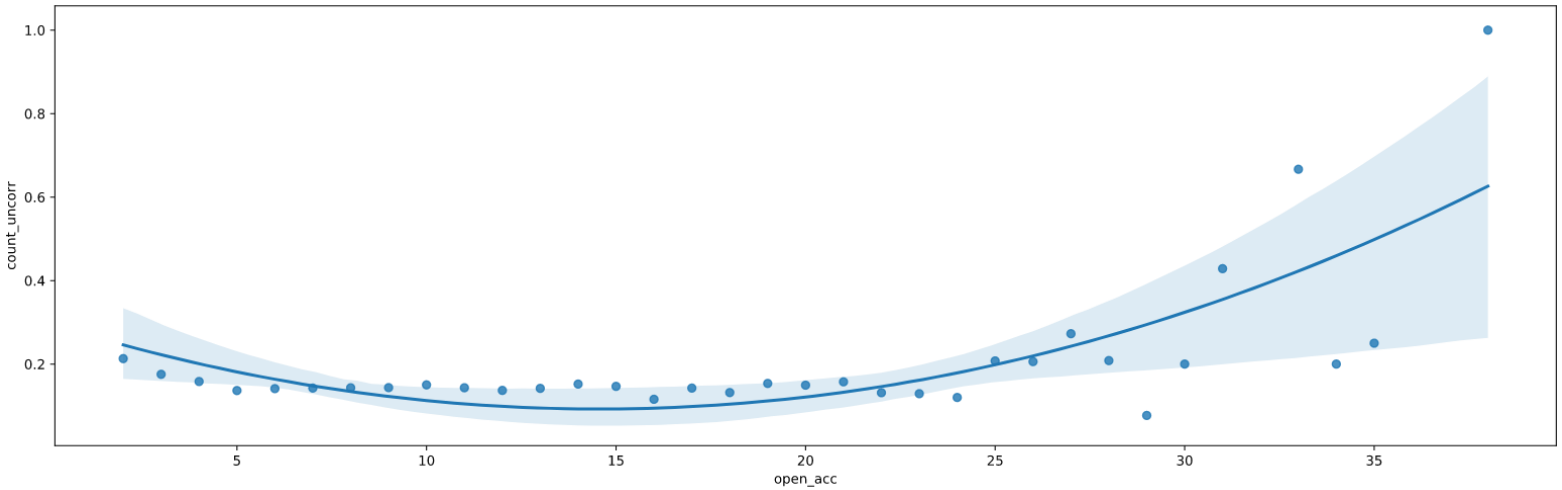


Result Summary:-

Loan Default rate increases with increase in enquiry count.

Note:- y axis correspond to defaulted loan that has been normalized to vary between 0 and 1.

Total Open account Analysis

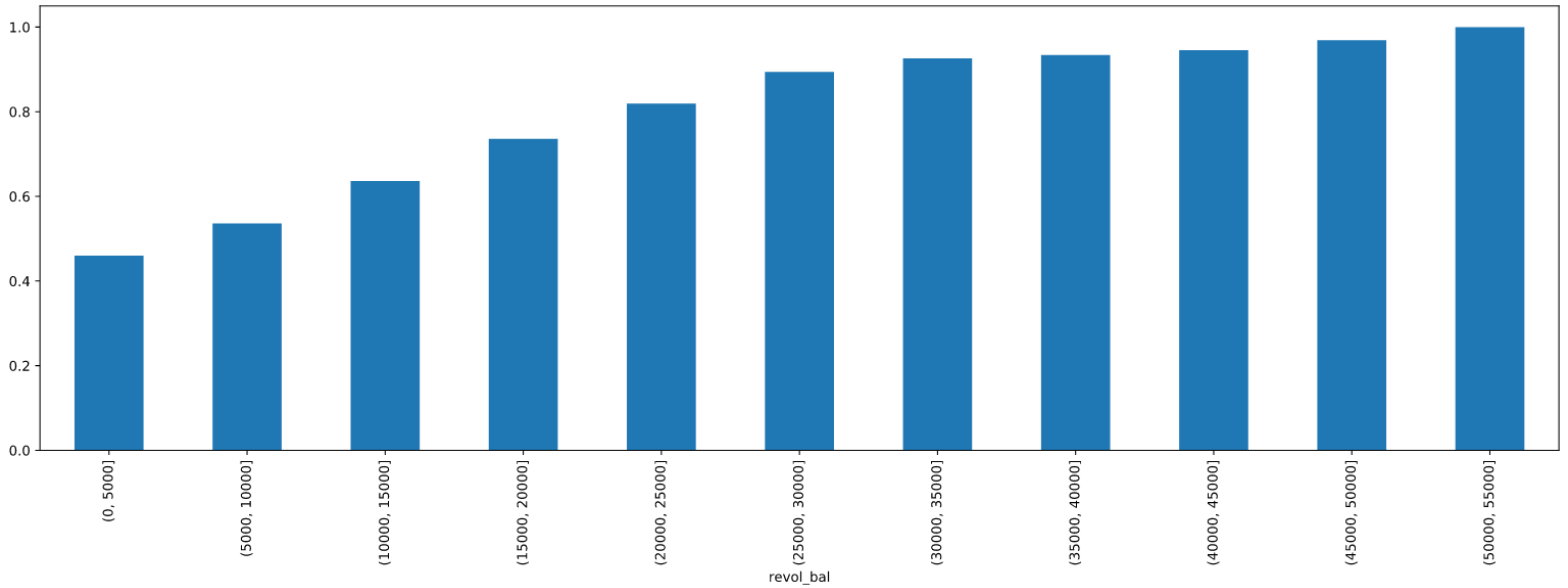


Result Summary:-

Loan Default rate increases when open account is too low or too large and touches bottom when open account is around 15.

Note:- y axis correspond to defaulted loan that has been normalized to vary between 0 and 1.

Revolving balance Analysis

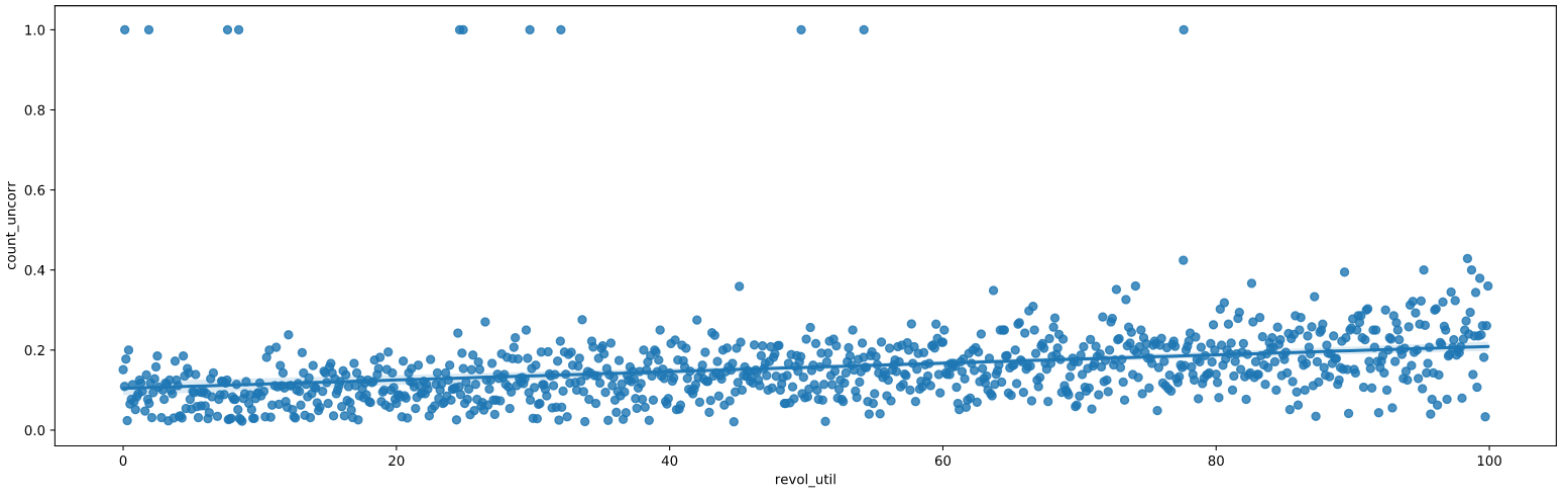


Result Summary:-

Loan Default rate increases with increase in revolving balance.

Note:- y axis correspond to defaulted loan that has been normalized to vary between 0 and 1.

Revolving utility Analysis

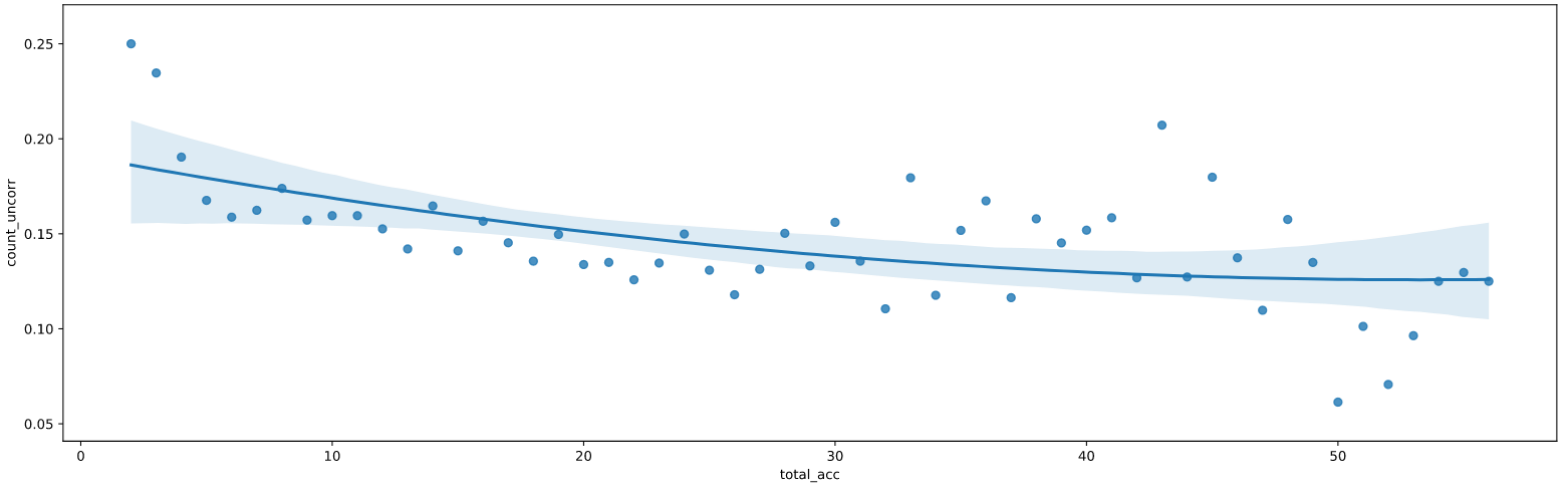


Result Summary:-

Loan Default rate slightly increases with increase in revolving utility.

Note:- y axis correspond to defaulted loan that has been normalized to vary between 0 and 1.

Total account Analysis

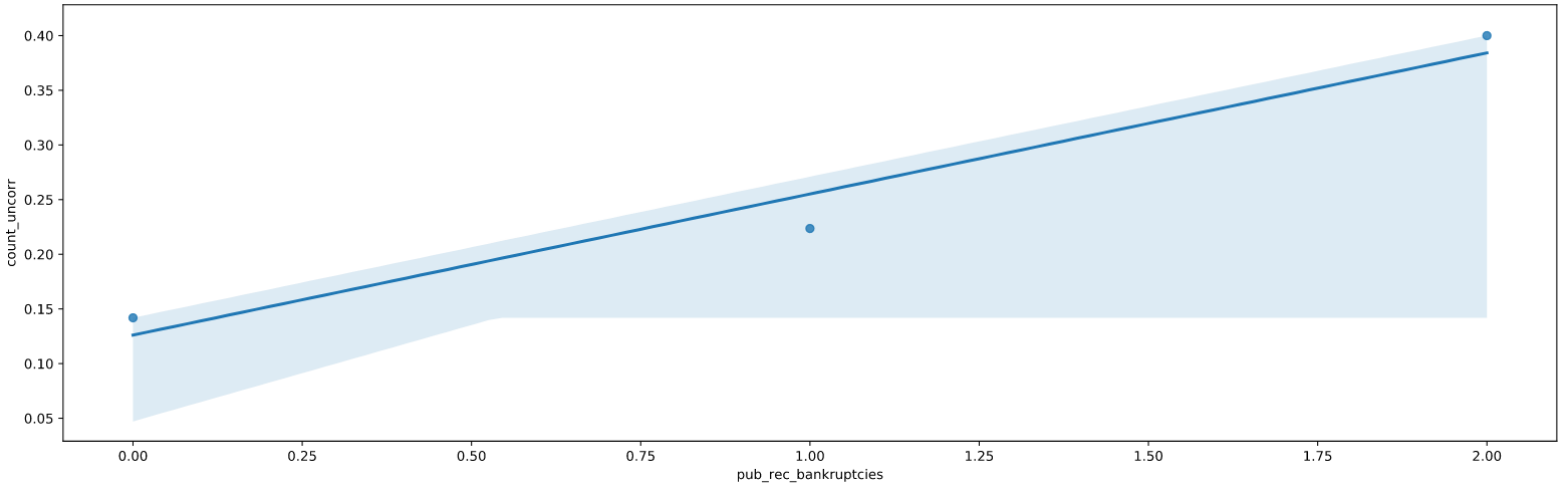


Result Summary:-

Loan Default rate decreases with increase in total account.

Note:- y axis correspond to defaulted loan that has been normalized to vary between 0 and 1.

Public recorded bankruptcies Analysis



Result Summary:-

Loan Default rate increases with increase in recorded bankruptcies.

Note:- y axis correspond to defaulted loan that has been normalized to vary between 0 and 1.

Conclusion:-

Few main analytic results have been shared in this Presentation. More results can be found in the analytics notebook.