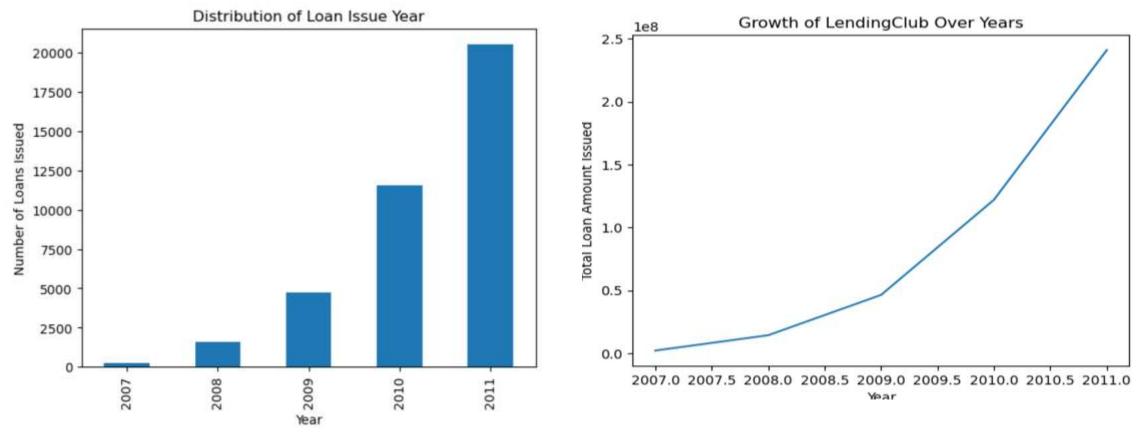
Lending Club Case Study

Group members: Hariharanath Matam Gauri Gujarathi

Objective

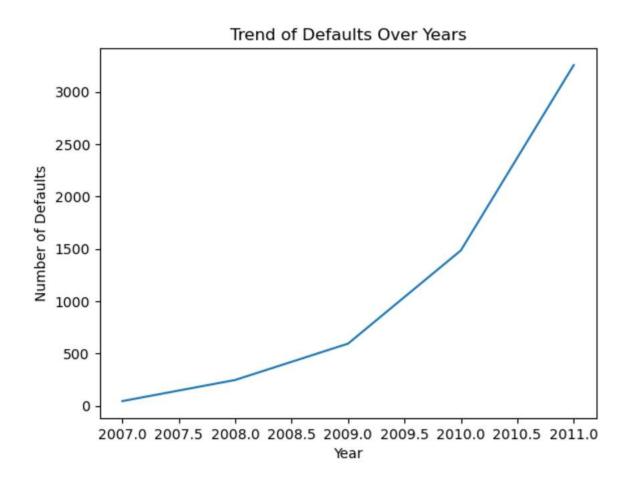
- The objective of this case study is to use EDA to understand how the loan attributes will influence the tendency to default a loan
- When the company receives a loan application it has to decide for loan approval on the basis of loan applicant's profile

Lending Club Analysis – Loans since Launch

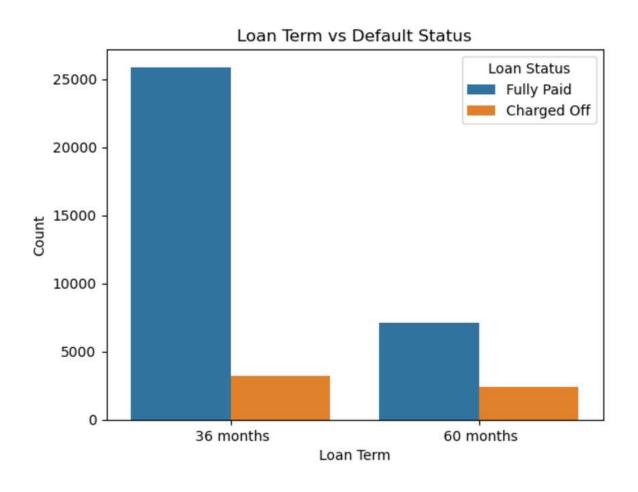


Lending Club company has been growing at rapid pace since it launch from both number of Loans issued and from Loan amount issued

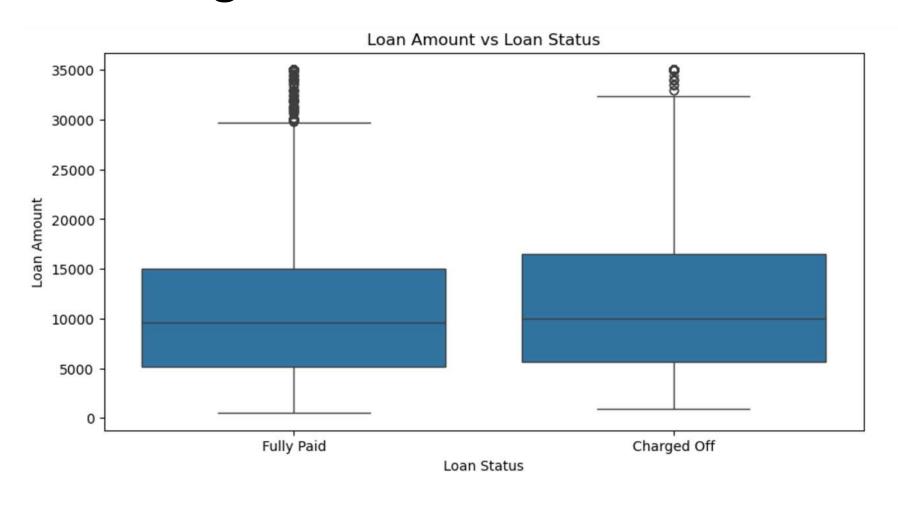
No of Defaulters growing at the same pace as business is growing



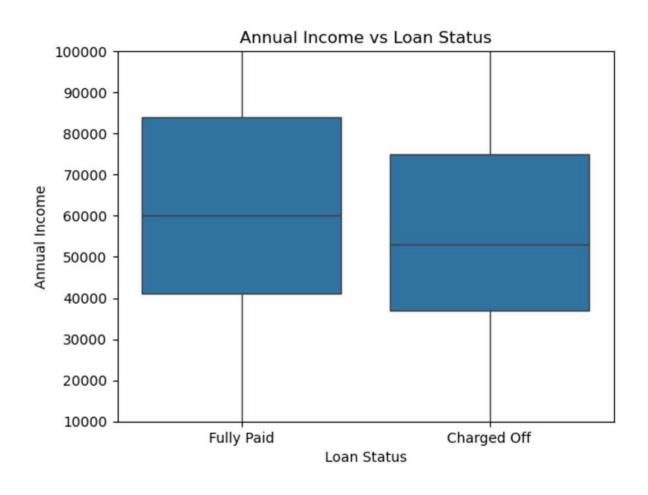
Lending Club has issued higher number of loans with lesser term but default rate is higher in loans with higher term



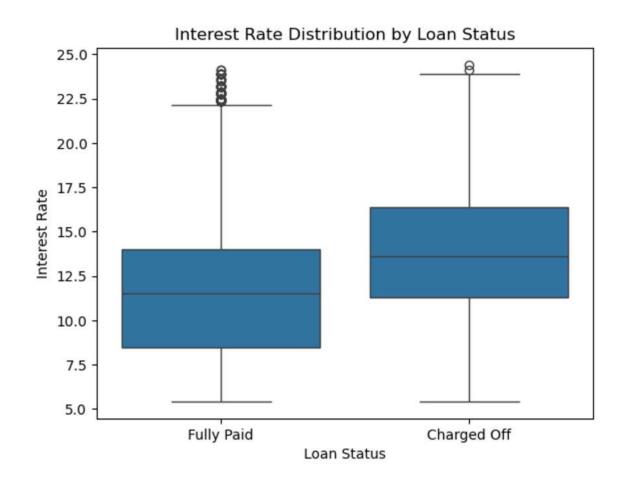
There is a tendency to default when loan amount is higher



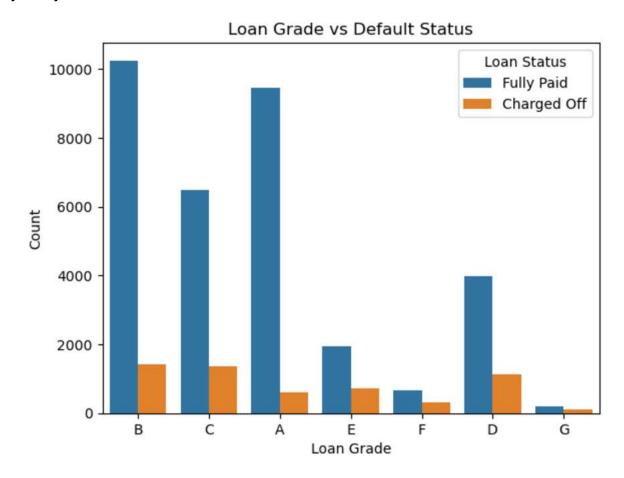
Lower income levels have higher tendency to default



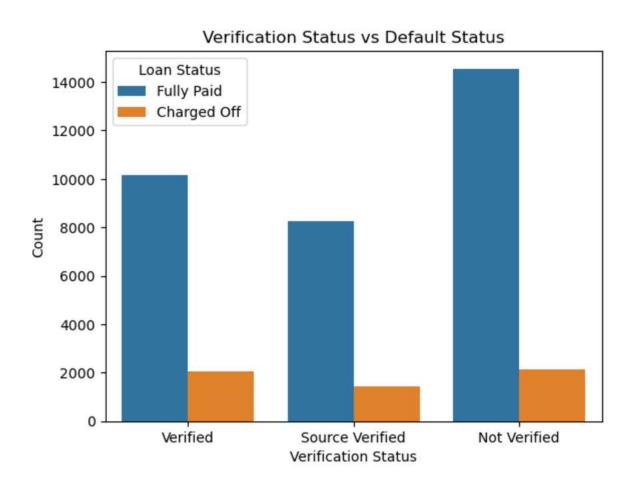
There is a higher tendency to default when interest rate are higher



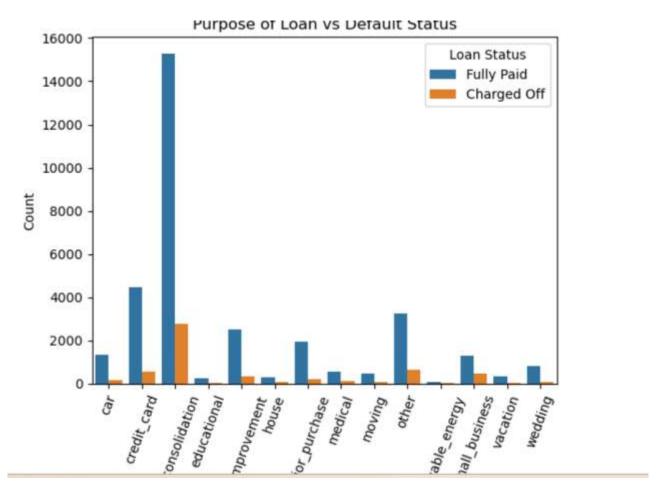
There is a higher frequency of default in Grade D,E,F & G



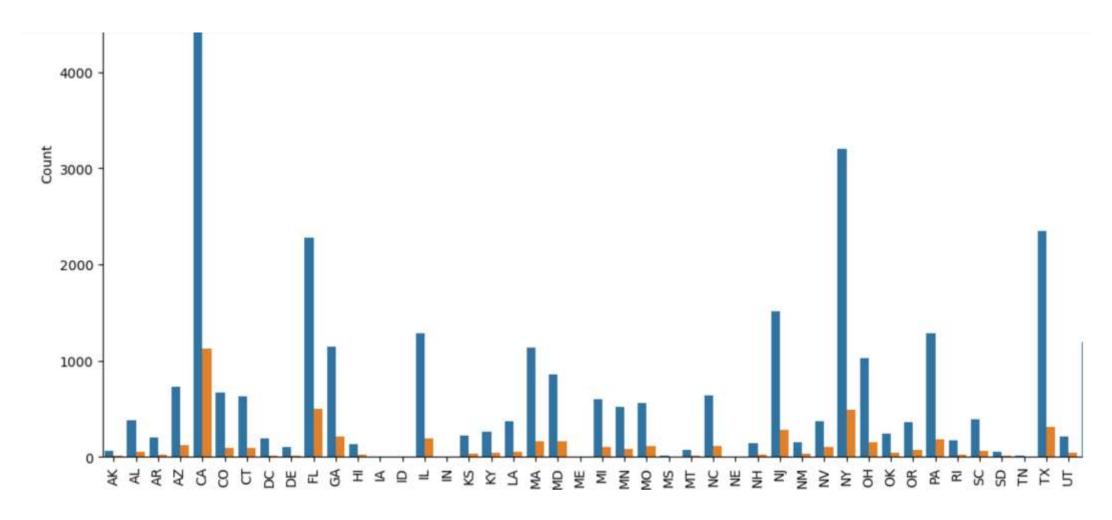
There is a higher % of defaults in verified category compared to non verified category



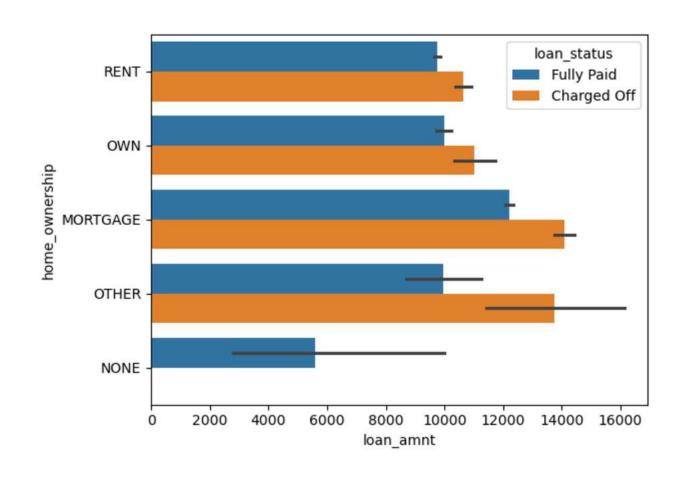
It Seems there is a higher demand for loan for debt consolidation, it as highest number of defaults



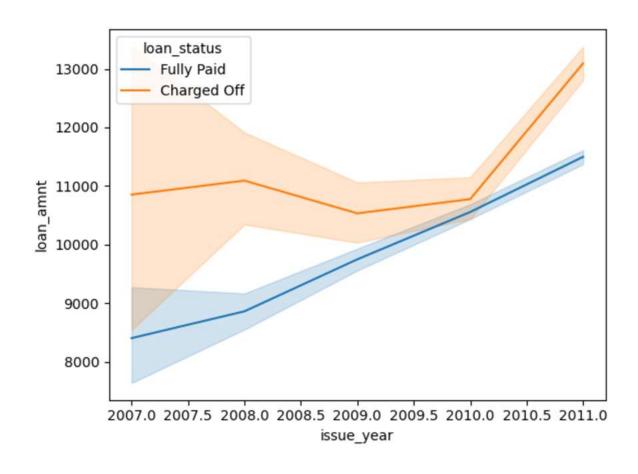
High number of default cases for State CA,FL and NY and TX States



For mortgage Ownership there is a high chance of Default



There is a spike in defaulted loans starting from 2010



Conclusion

Lending Club has grown consistently over the period of years. However the defaults have also grown at the same rate. Few consideration they should keep in mind:

- There is a higher tendency to default when the loan amount is high. They should be diligent in such cases
- There is a higher tendency to default if the interest rates are high
- Implement stricter loan amount limits based in the borrower's income
- Default rates can be reduced by putting lower limits for lower income rates borrowers
- Lending Club should perform higher diligence for the loans issued to states CA,FL,NY and TX
- There is a higher % of defaults in verified category compared to non verified category, they have to tighten up there loan verification process