LENDING CLUB CASE STUDY

SUBMISSION

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Abstract

- Lending Club is a place for providing and borrowing loans online.

- This analysis is performed for a consumer finance company that specializes in lending various types of loans to urban customers. When the company receives a loan application, the company must decide for loan approval based on the applicant's profile.

- There are two types of risks associated:

- If the applicant is likely to repay the loan, then not approving the loan results in a loss of business to the company

- If the applicant is not likely to repay the loan, i.e. he/she is likely to default, then approving the loan may lead to a financial loss for the company

- The data provided for analysis contains information about past loan applicants and whether they 'defaulted'. In this case study, we use EDA to understand how consumer attributes and loan attributes influence the tendency of default.
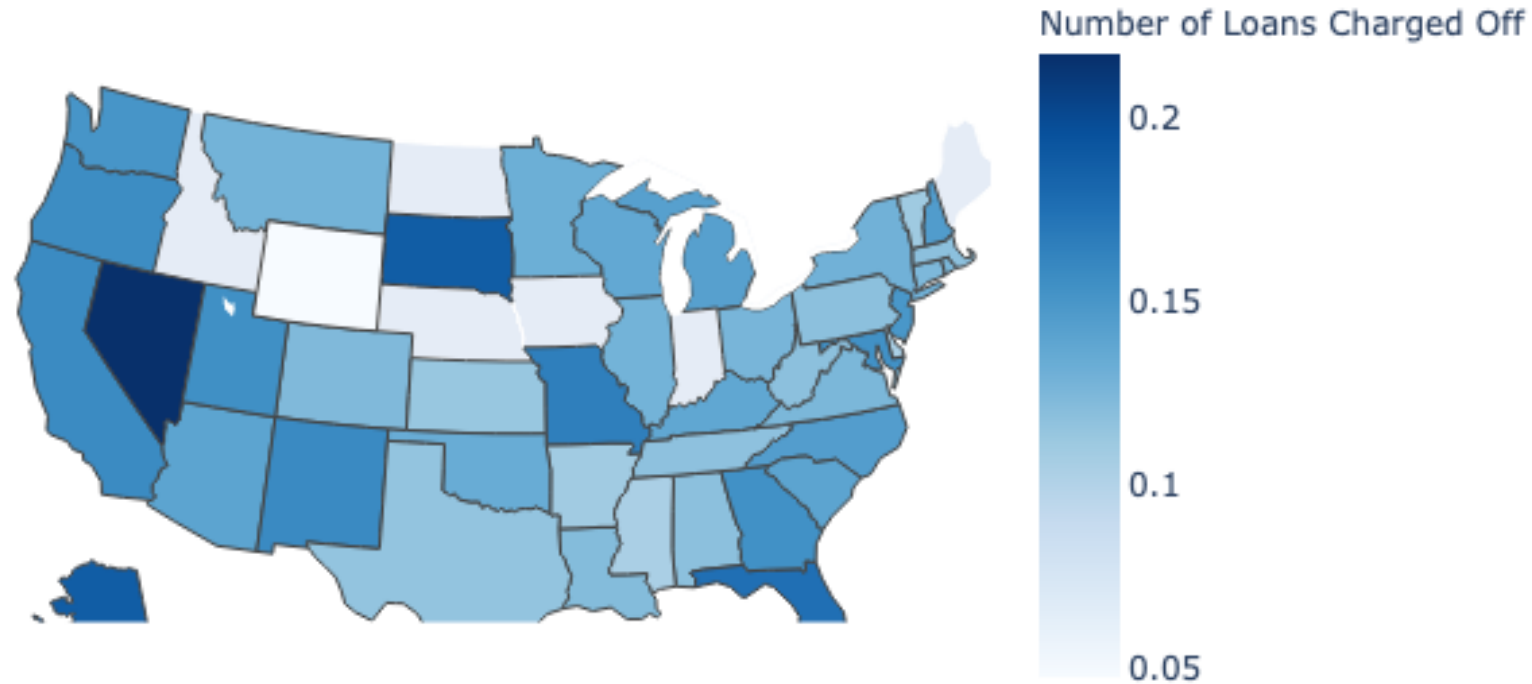
Methodology
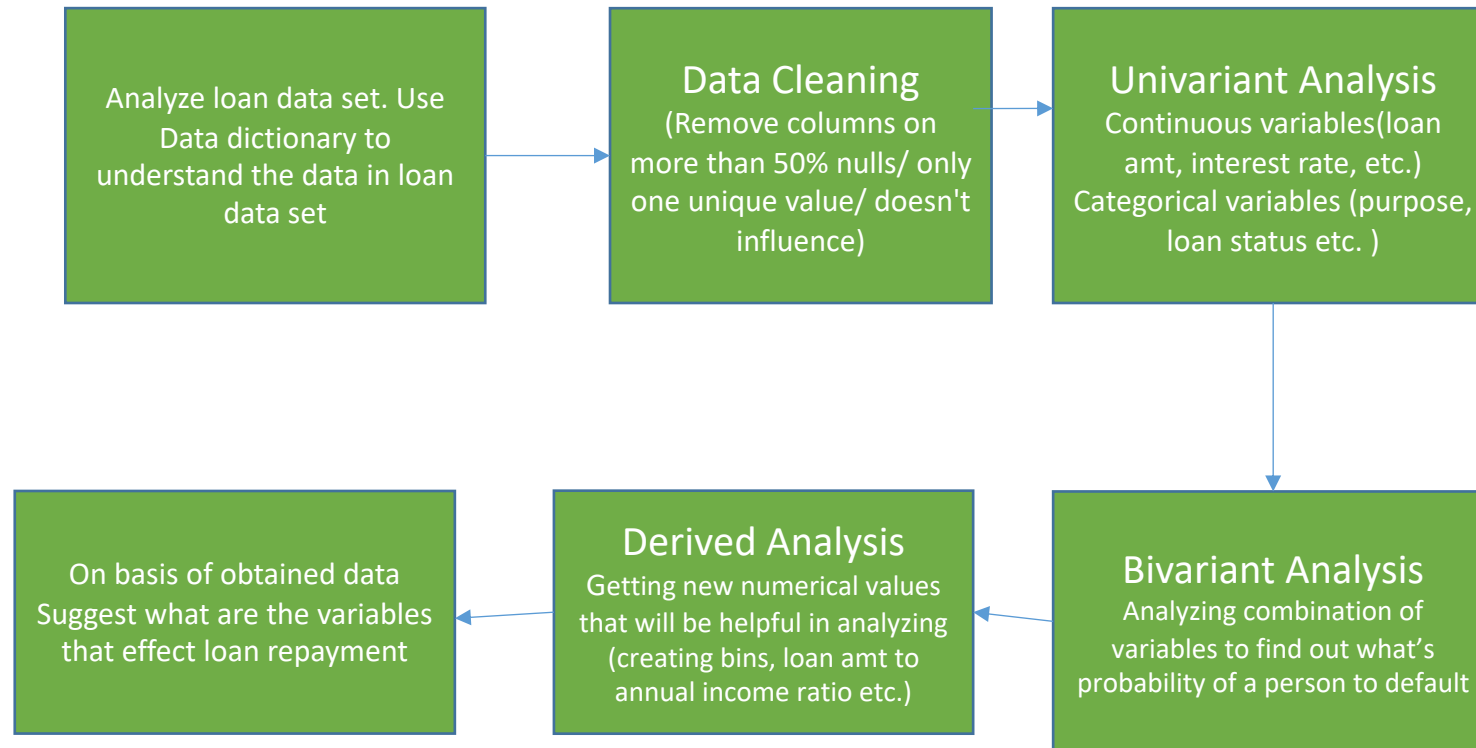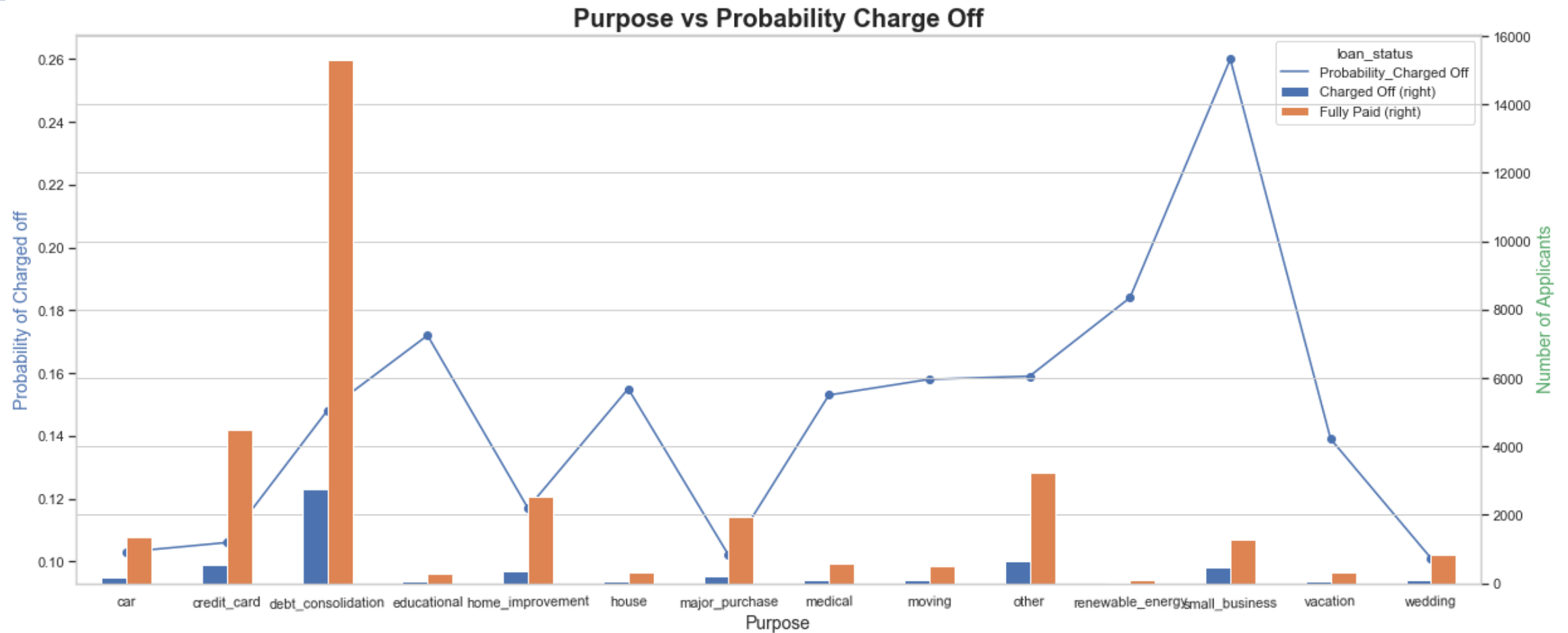
There seems to a pattern in the loan purpose given by the defaulters.
Small business, Debt consolidation and Credit card are the top purposes given by applicants whose probability of defaulting is high

Loans being Charged Off from Lending Club

State of the applicate also seems to be a factor affecting loan repayment.

NV, SD, FL and CA are the top states in US where the probability of a loan getting charged-off is high
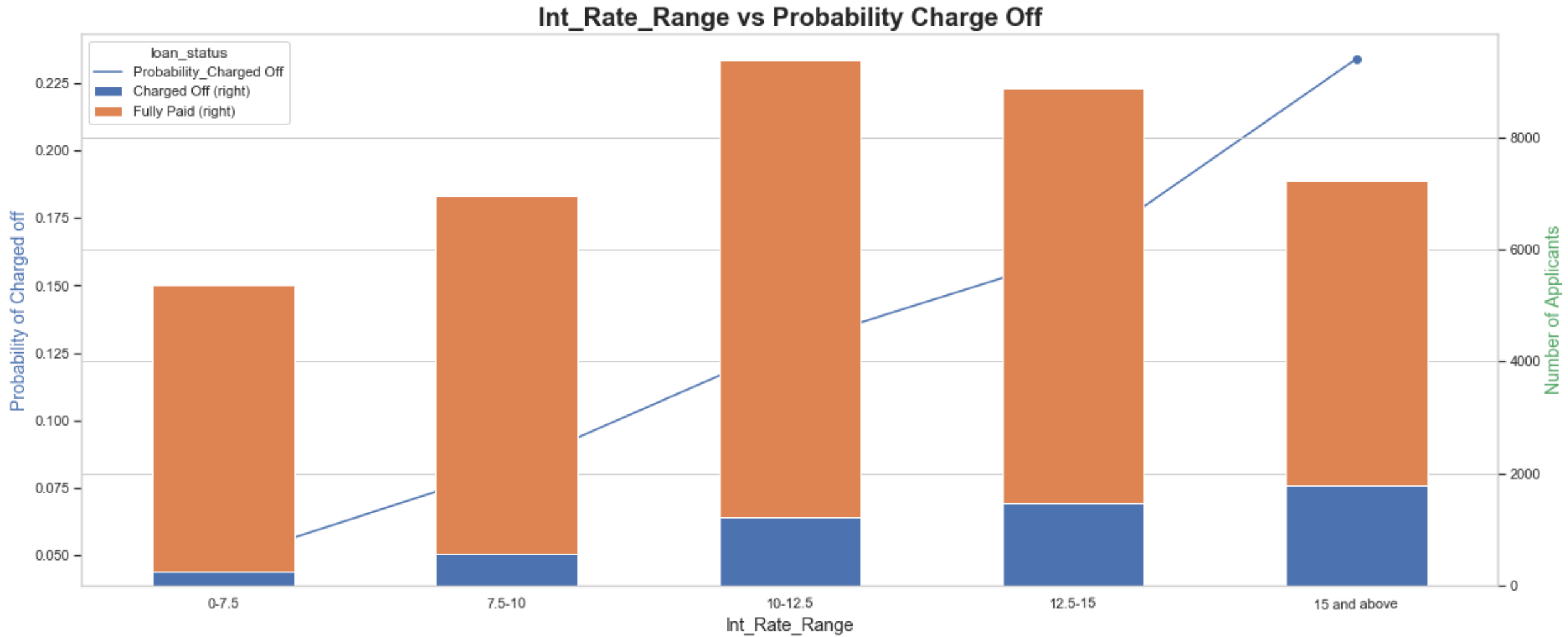
Loan interest is one of the main factor that is affecting loan status.
As shown in the graph the probability of a person defaulting increase with increased loan interest

Conclusions

From all the analysis apart the previous mentioned factors below are some of the other variables that seems to affect loan defaulting

- Applicant owning house are less probable to default

- Grade of loan :
  - G,F,E are the highest probability of charge_off

- Employee_length
  - Applicants having 10+ years of employment have highest probability of charge_off

- Loan term
  - Applicants lending loan for 60 months term have double the chances of charge_off

- pub_rec_bankruptcies
  - Applicants having bank ruptcies record have more probability of charge_off

These are few of the factors which has to be studied in depth before granting a loan to the applicant