

LENDING CLUB

– CASE STUDY

By,

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Lending Club Case Study: Agenda

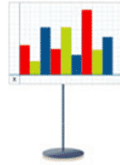
How Lending Club Works



Borrowers apply for loans.
Investors open an account.



Borrowers get funded.
Investors build a portfolio.



Borrowers repay automatically.
Investors earn & reinvest.

What is Lending Club?

Lending Club is a marketplace for personal loans that matches borrowers who are seeking a loan with investors looking to lend money and make a return.

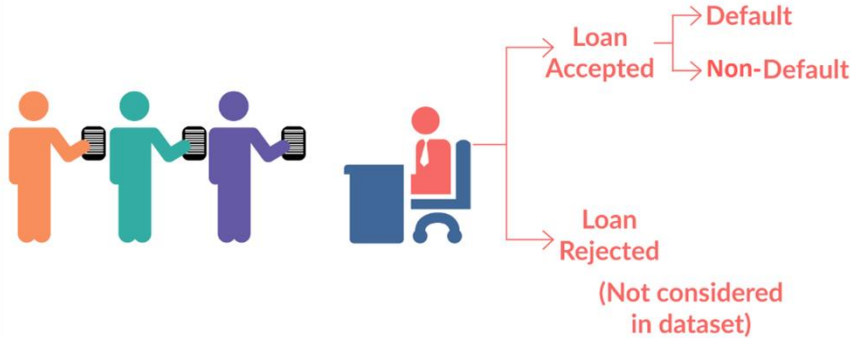
When the company receives a loan application, the company has to make a decision for loan approval based on the applicant's profile. Two types of risks are associated with the bank's decision:

- 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.

Agenda: To identify driving factors (or driver variables) behind loan default, i.e. the variables which are strong indicators of default which the company can utilize for its portfolio and risk assessment.

Loan Status

LOAN DATASET



loan_status:

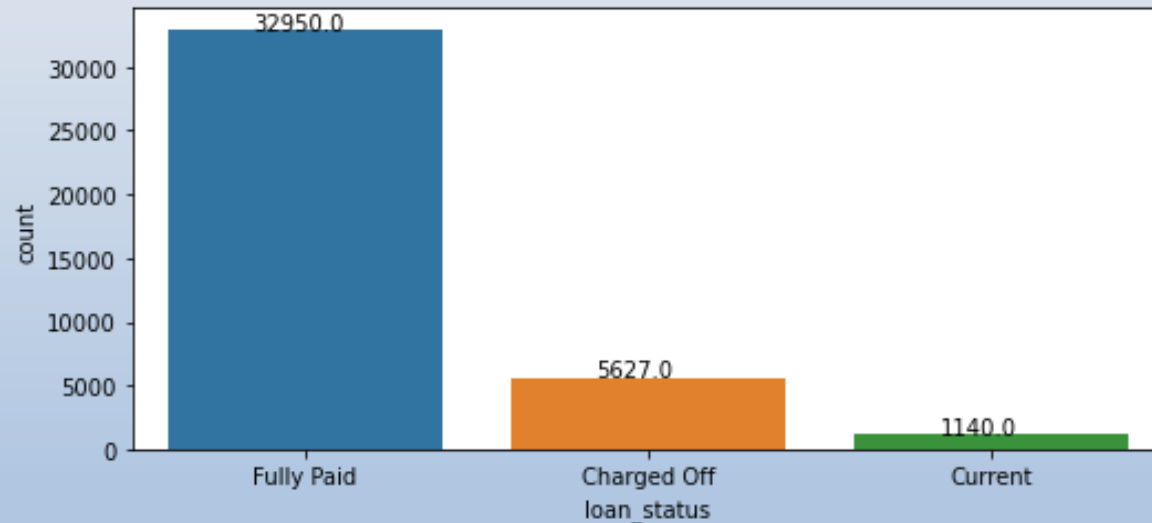
Fully Paid	Non Defaulters
Charged off	Defaulters
Current	Cannot Say anything

Fully paid: Applicant has fully paid the loan (the principal and the interest rate)

Current: Applicant is in the process of paying the instalments, i.e. the tenure of the loan is not yet completed. These candidates are not labelled as 'defaulted'.

Charged-off: Applicant has not paid the instalments in due time for a long period of time, i.e. he/she has defaulted on the loan.

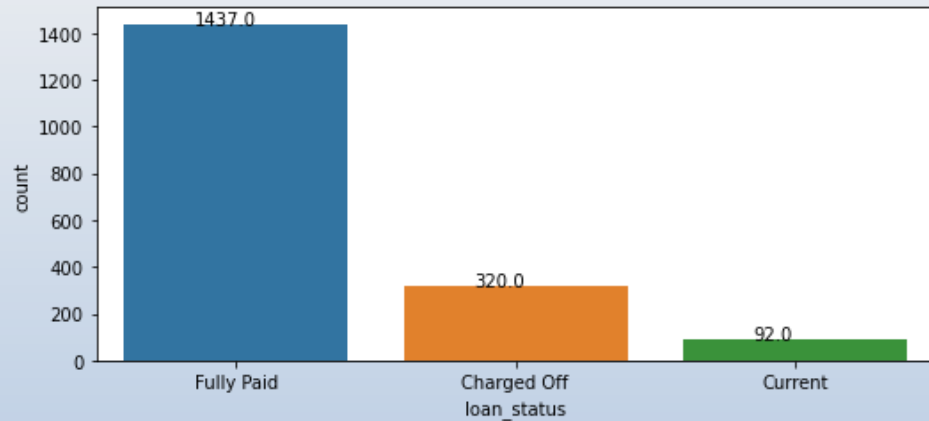
Analysis of data: Based on loan Status



Out of 39717, 5627 loans have been charged off. They are defaulters.

Comparatively the number of loans that have been charged off is far lesser than the Fully Paid.

Analysis of data: Based on loan Status

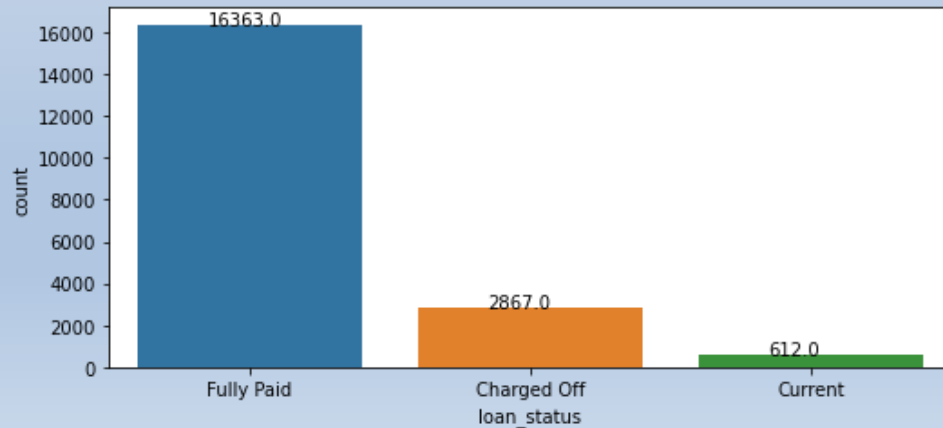


1849 people received less approved funded amount.

After checking loan status.

Out of 1849, 320 are charged off. These are defaulters.

Out of 1849, 92 are current.



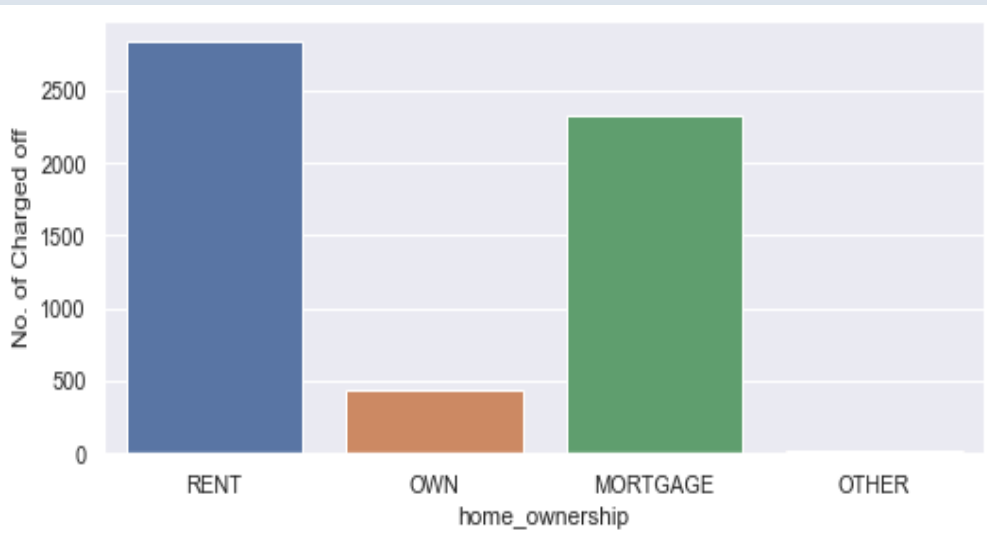
19842 people received less approved funded amount from investors.

After checking loan status.

Out of 19842, 2867 are charged off. These are defaulters.

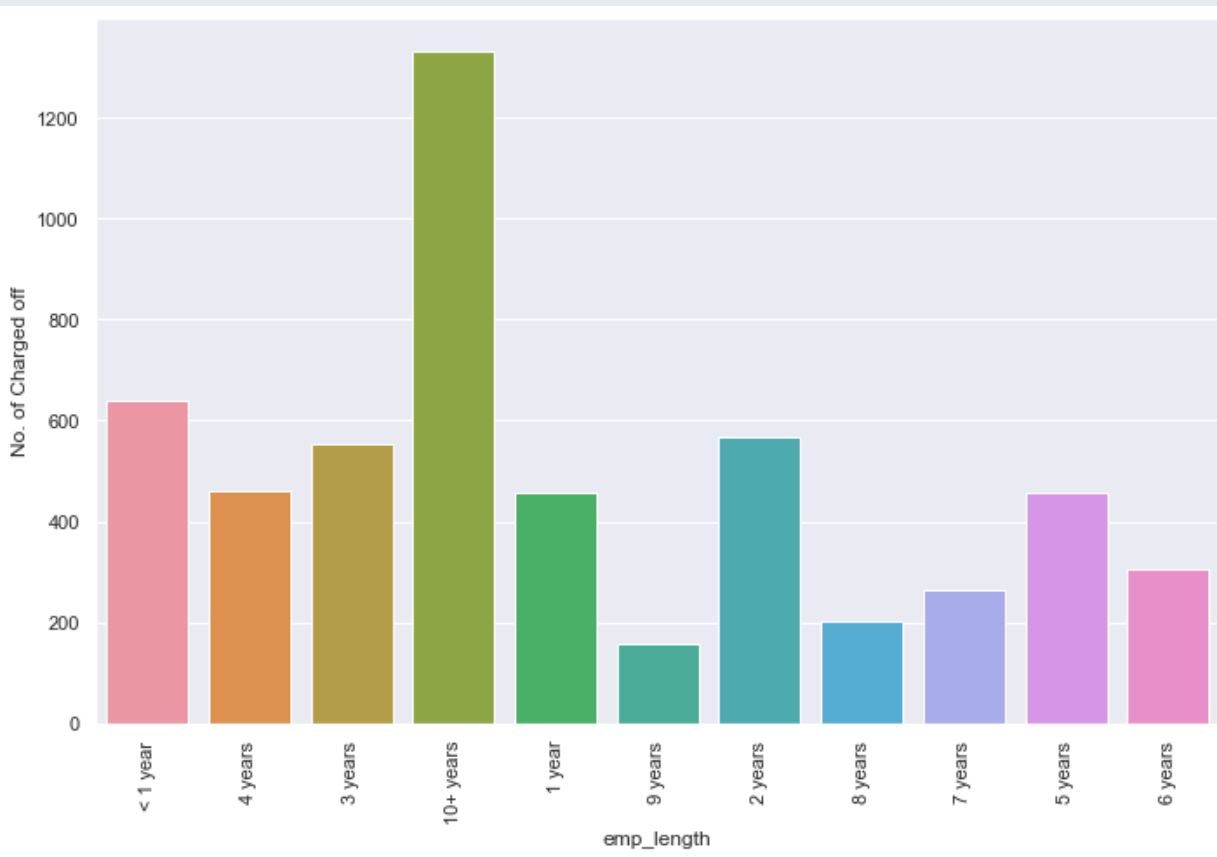
Out of 19842, 612 are current.

Defaulters: Based on home ownership



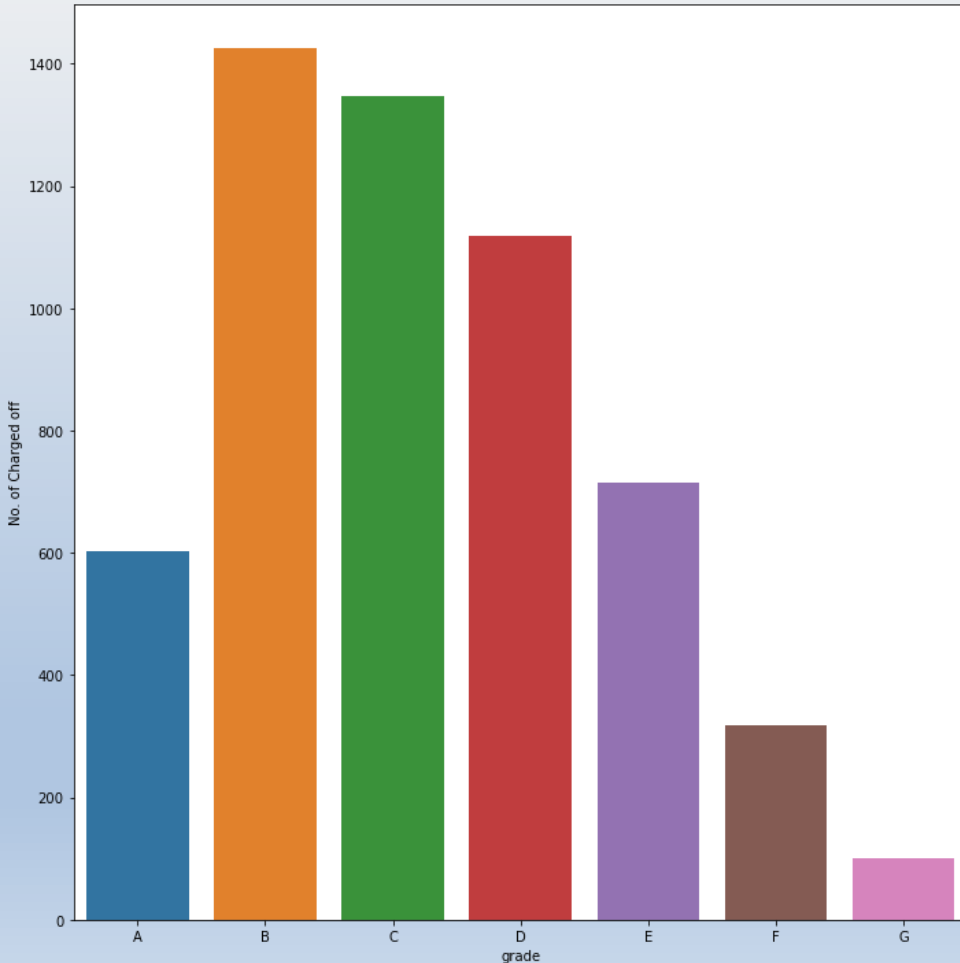
People who lives on Rent or whose home are mortgaged are among the majority of the defaulters.

Defaulters: Based on employee total experience



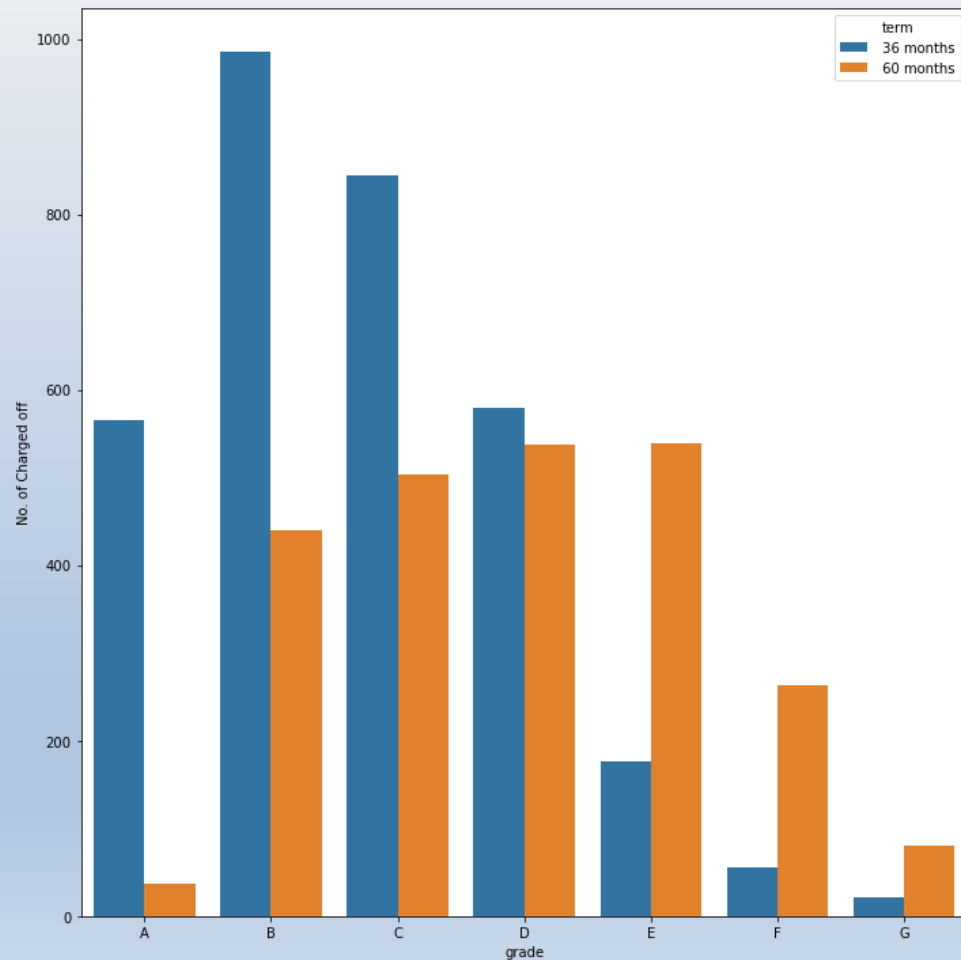
People with more than 10+ years of experience are among the majority of the defaulters.

Defaulters: Based on grade



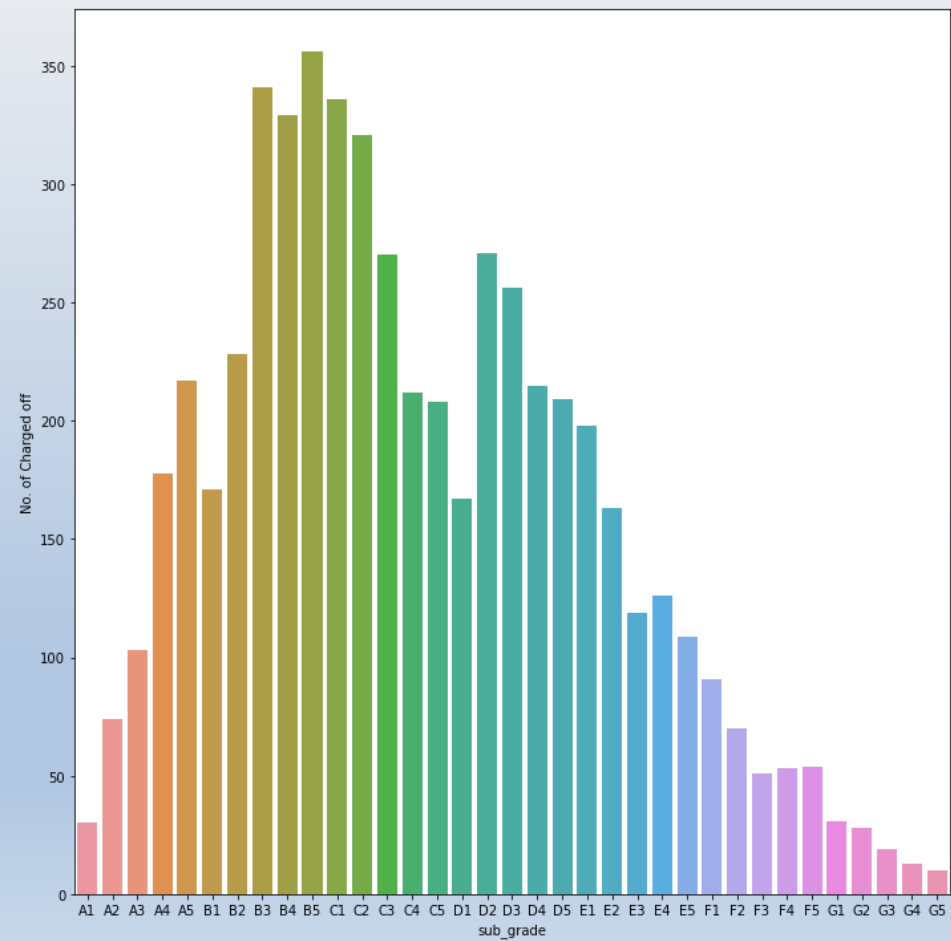
Loans with Grade B,C and D are among the majority of the defaulters .
More care needs to be taken while approving loans for these category.

Defaulters: Based on grade and loan term



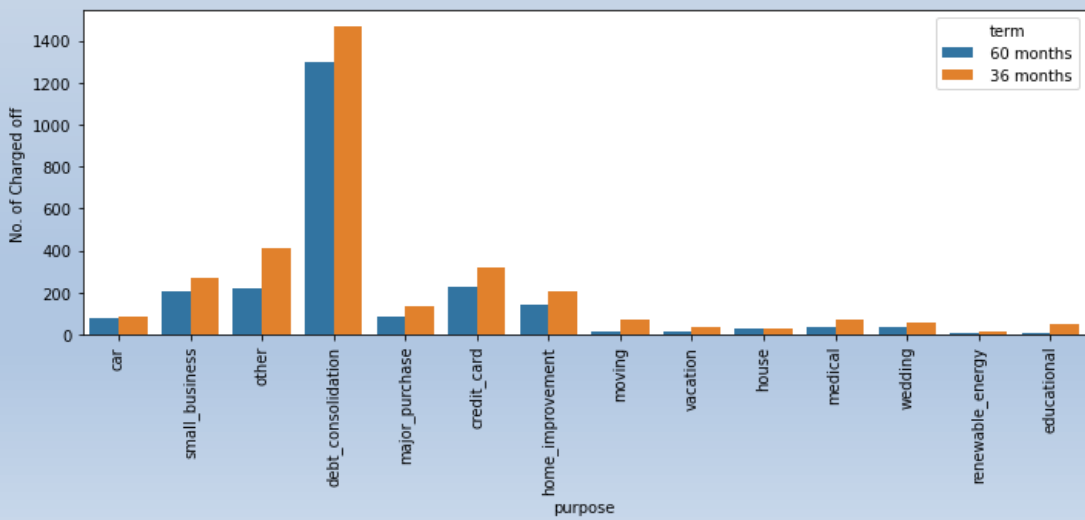
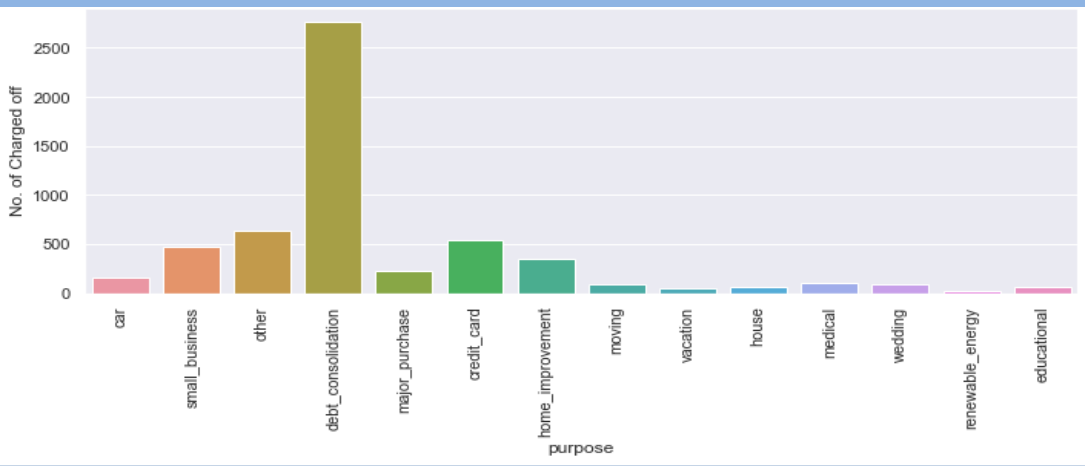
Upon analyzing the term for defaulters among various grades it is observed that the A, B , C and D grade have defaulted mostly on a 36 month duration.

Defaulters: Based on sub-grade



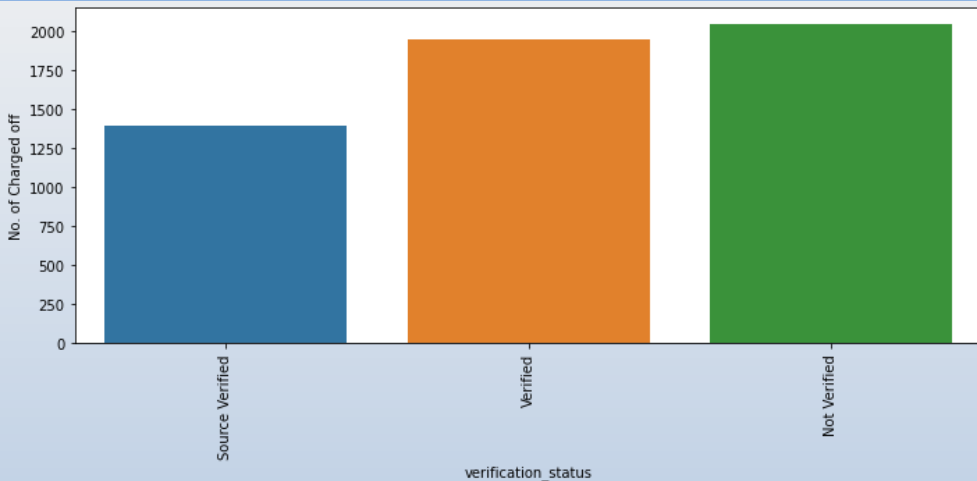
Loans with Sub-Grade B3, B4, B5, C1, C2, C3, D2 and D3 are among the majority of the defaulters.

Defaulters: Based on purpose of loan and term

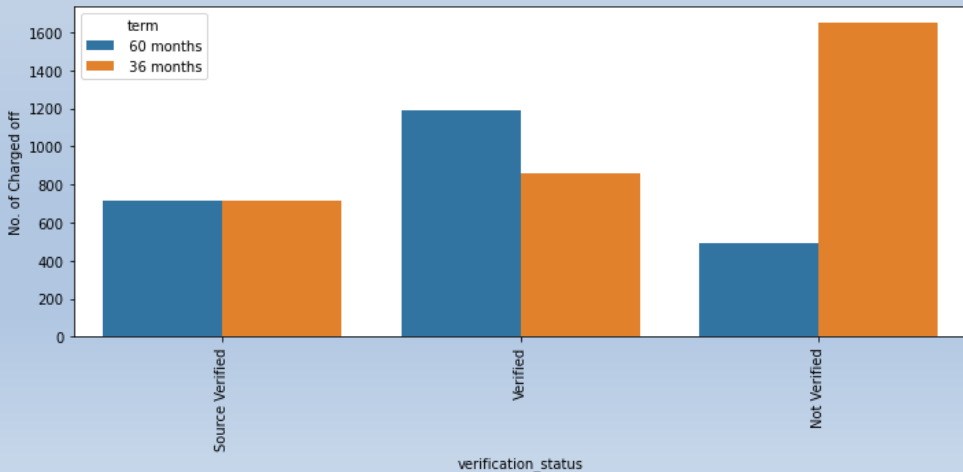


People who have taken loan for debt consolidation are among the majority of the defaulters.

Defaulters: Based on purpose of loan and term



Comparing with the percentage of charged off loans against the verification status, Source Verified loans have comparatively less chance to default. It is recommended to better verify at source.



Extra observation:

The verification status when compared against the defaulters in basis of terms, it is observed that loan which are not verified are more likely to default for a loan with term of 36 months.

Conclusion

Below are driving category with defaulted variable, lending club company needs to observe more while approving/giving loans.

Driving Category	Defaulted variable
Home ownership	Rented & Morgaged
Employee total experience	10+ years
Grade	B, C and D
Sub-Grade	B3, B4, B5, C1, C2, C3, D2 and D3
Purpose of loan	Debt consolidation