

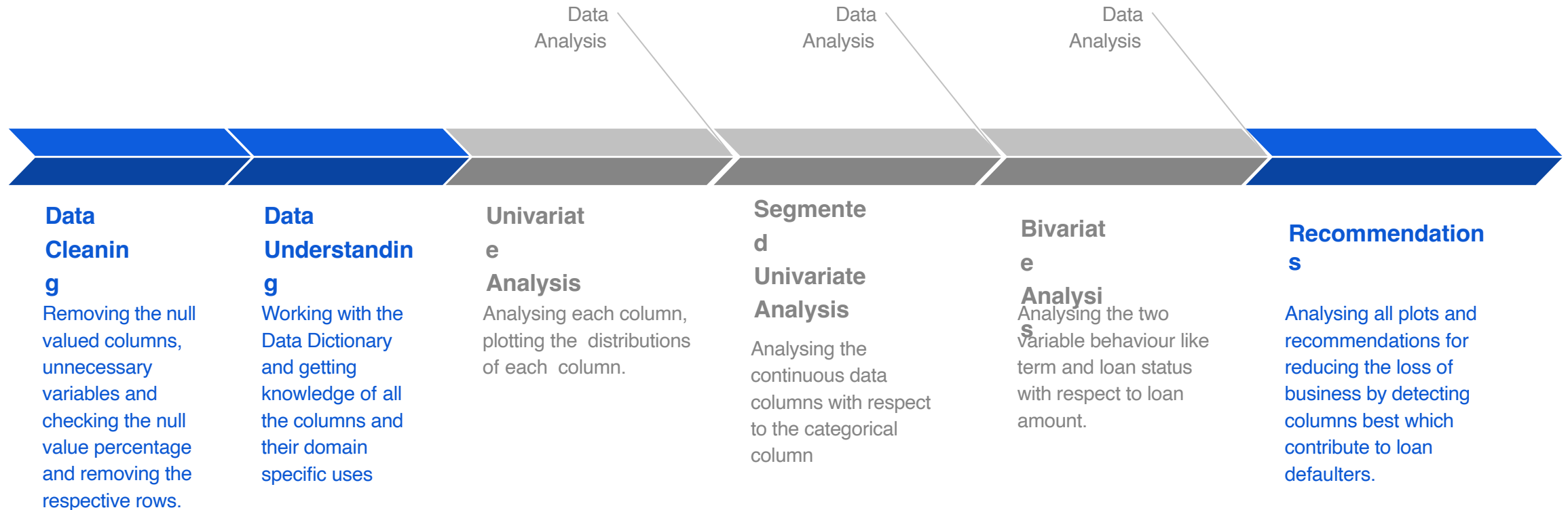
# Lending Club Case Study

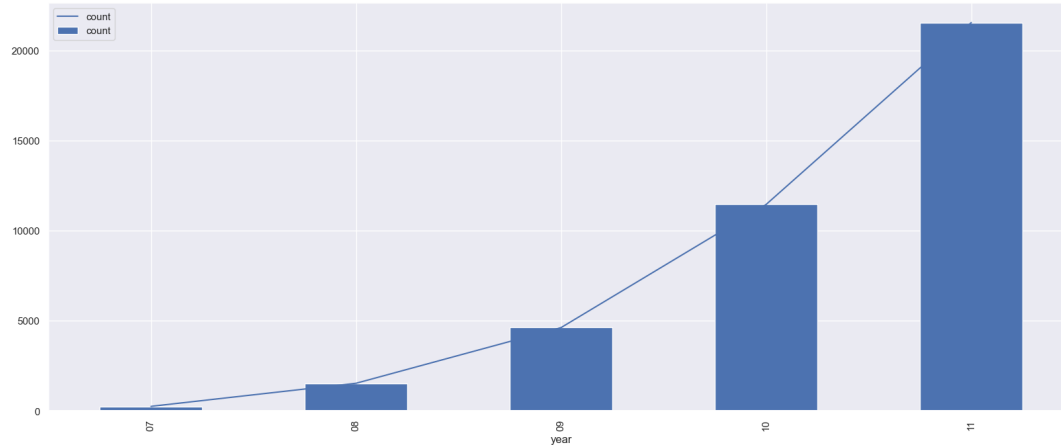
**Group Members:**

*Sanskriti Yadav*

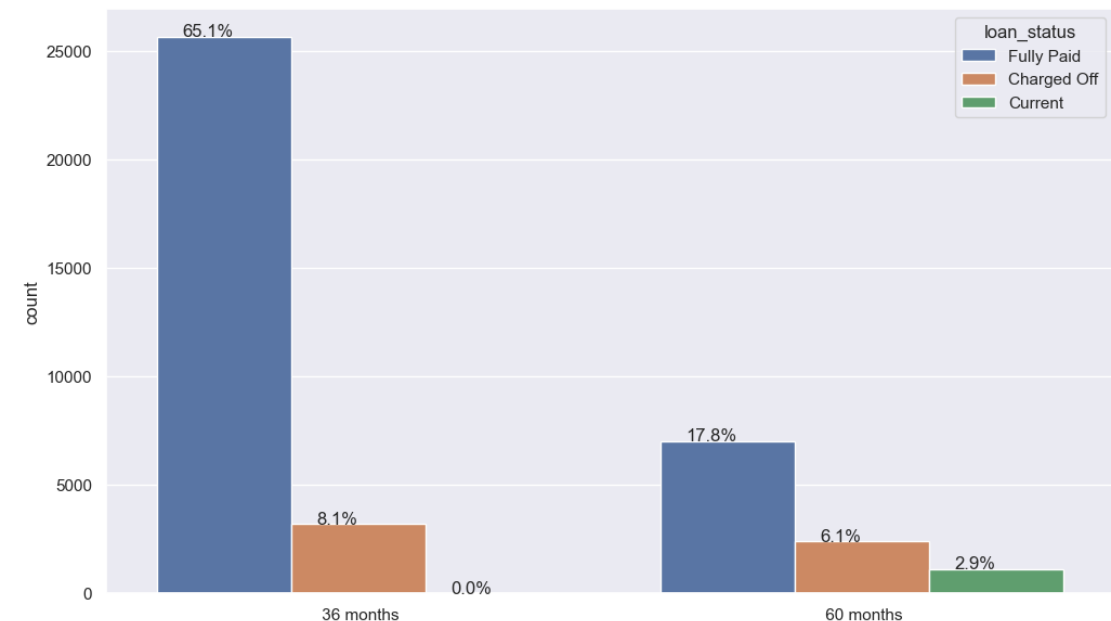
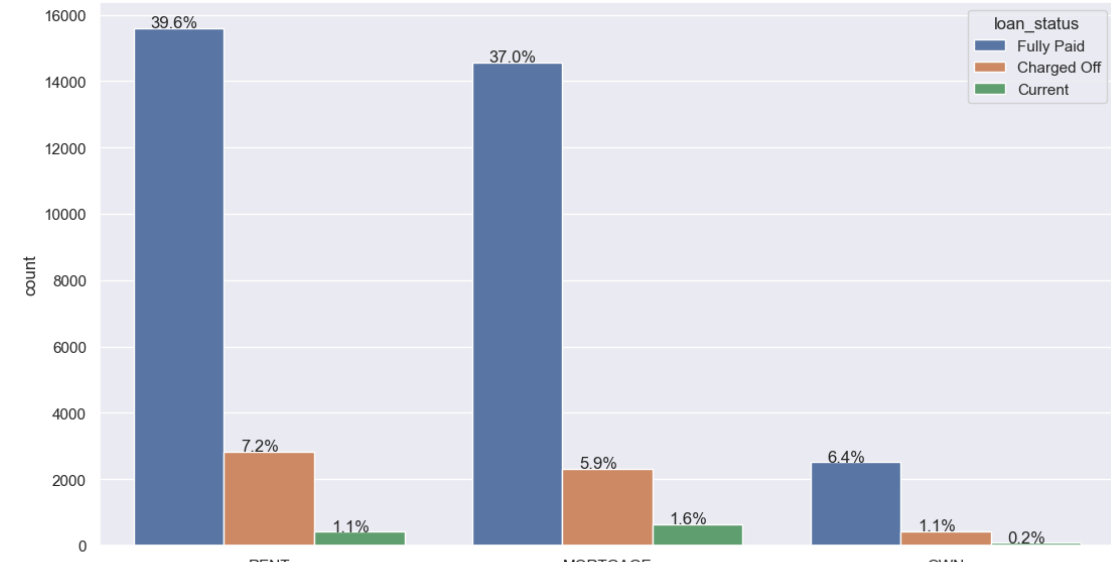
*Nikesh Kumar*

- Lending club is the largest online loan marketplace, facilitating personal loans, business loans, and financing of medical procedures.
- Borrowers can easily access lower interest rate loans through a fast online interface.
- The objective of analysis is to use the information about past loan applicants and find whether they ‘defaulted’ or not.

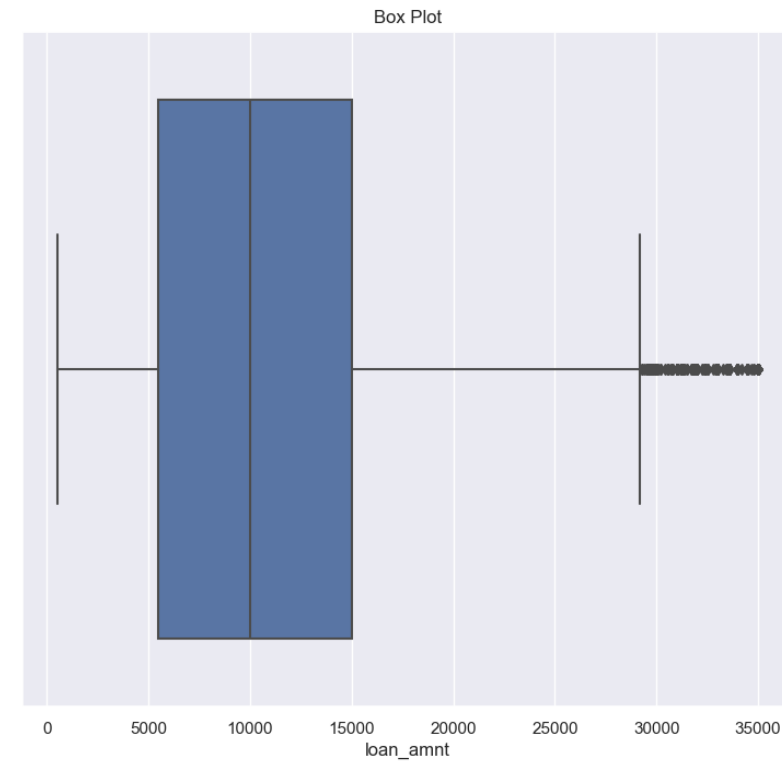
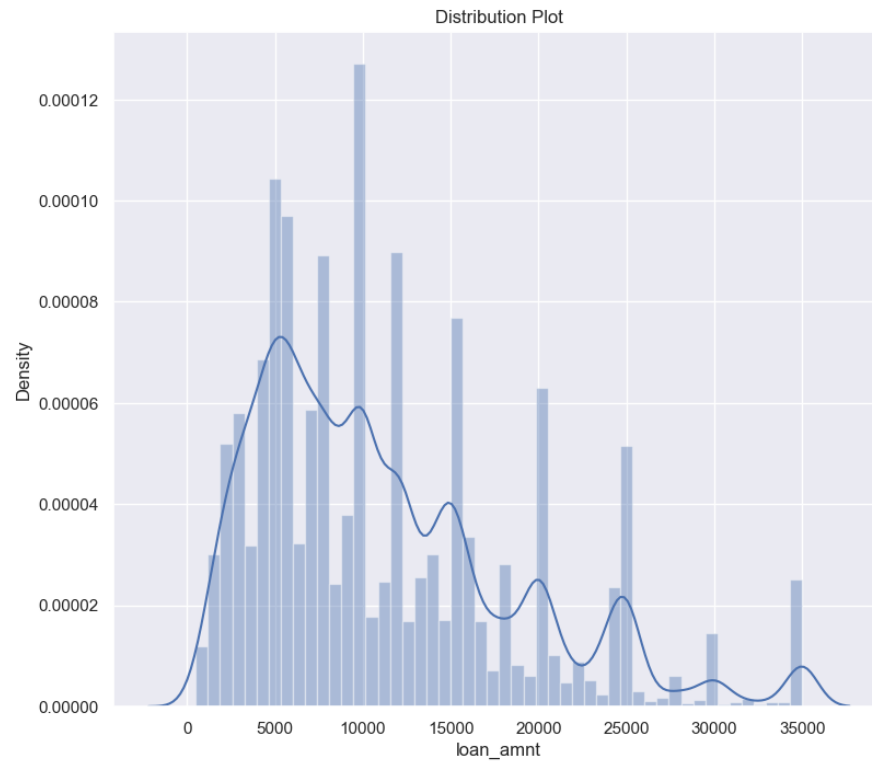




- Around 47.9% people have rented property and 44.5% have mortgaged property whereas only 7.7% people have their own house.
- Number of loan applications are increasing year on year
- Around 73% people opted for 36 months as loan term.

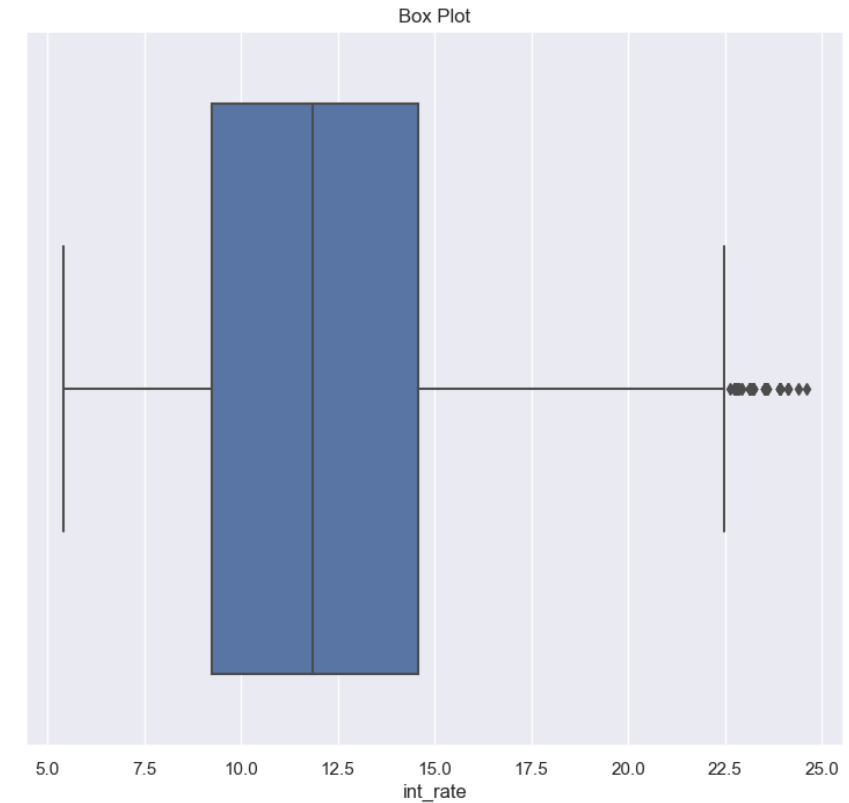
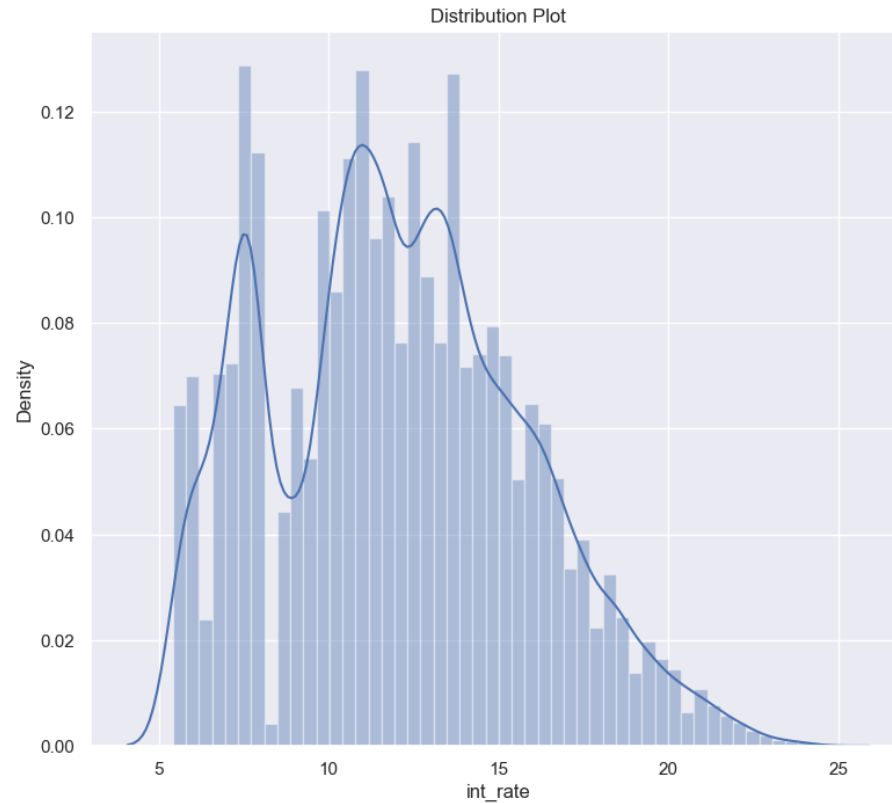


# Univariate Analysis- Loan Amount

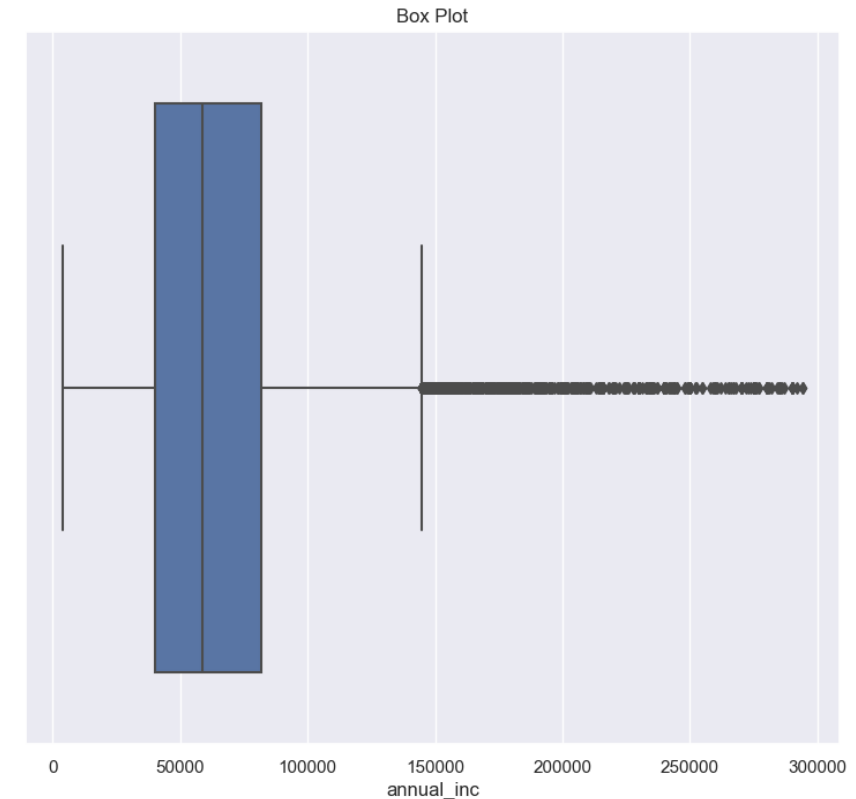
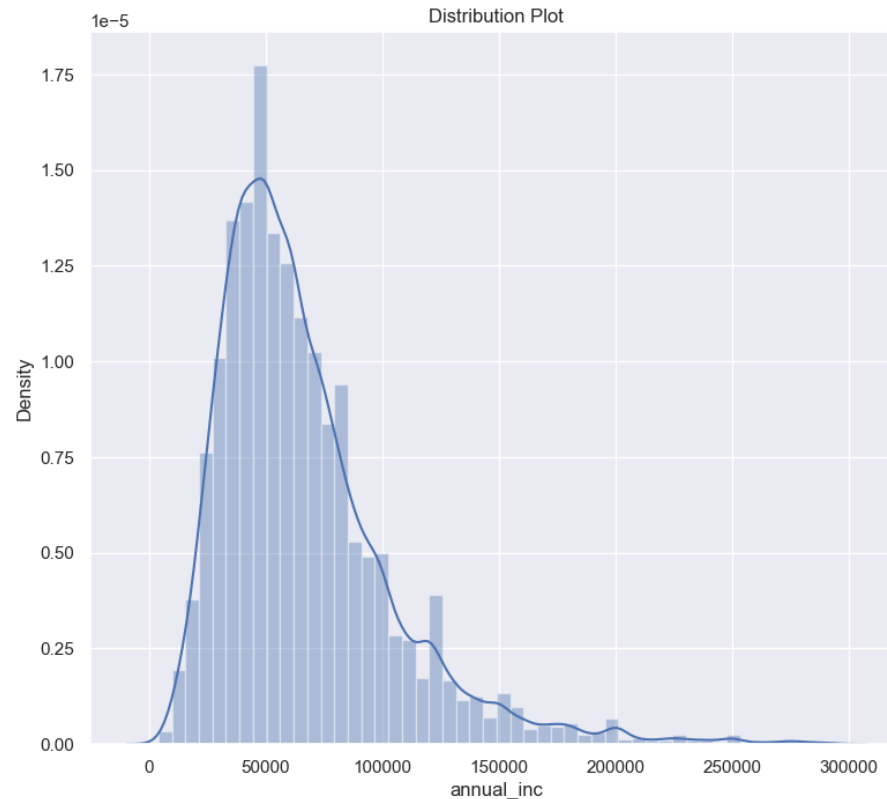


- Most of the loans sanctioned were between 5000 to 15000

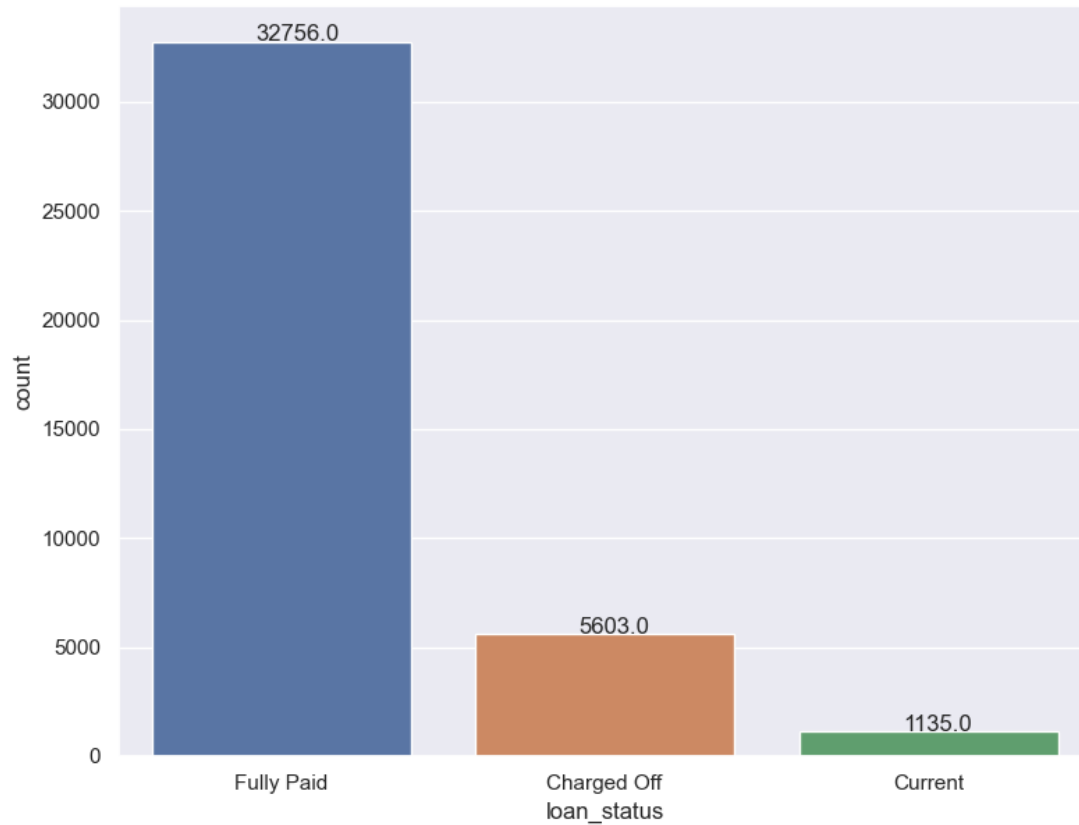
# Univariate Analysis - Interest Rates



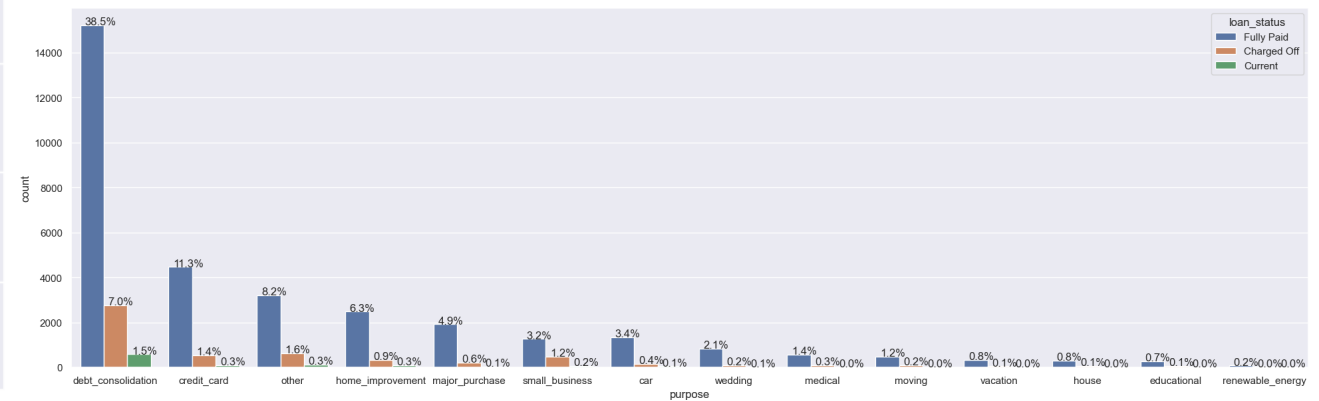
- The maximum defaulters are observed when the interest rates ranges between 8 to 15%



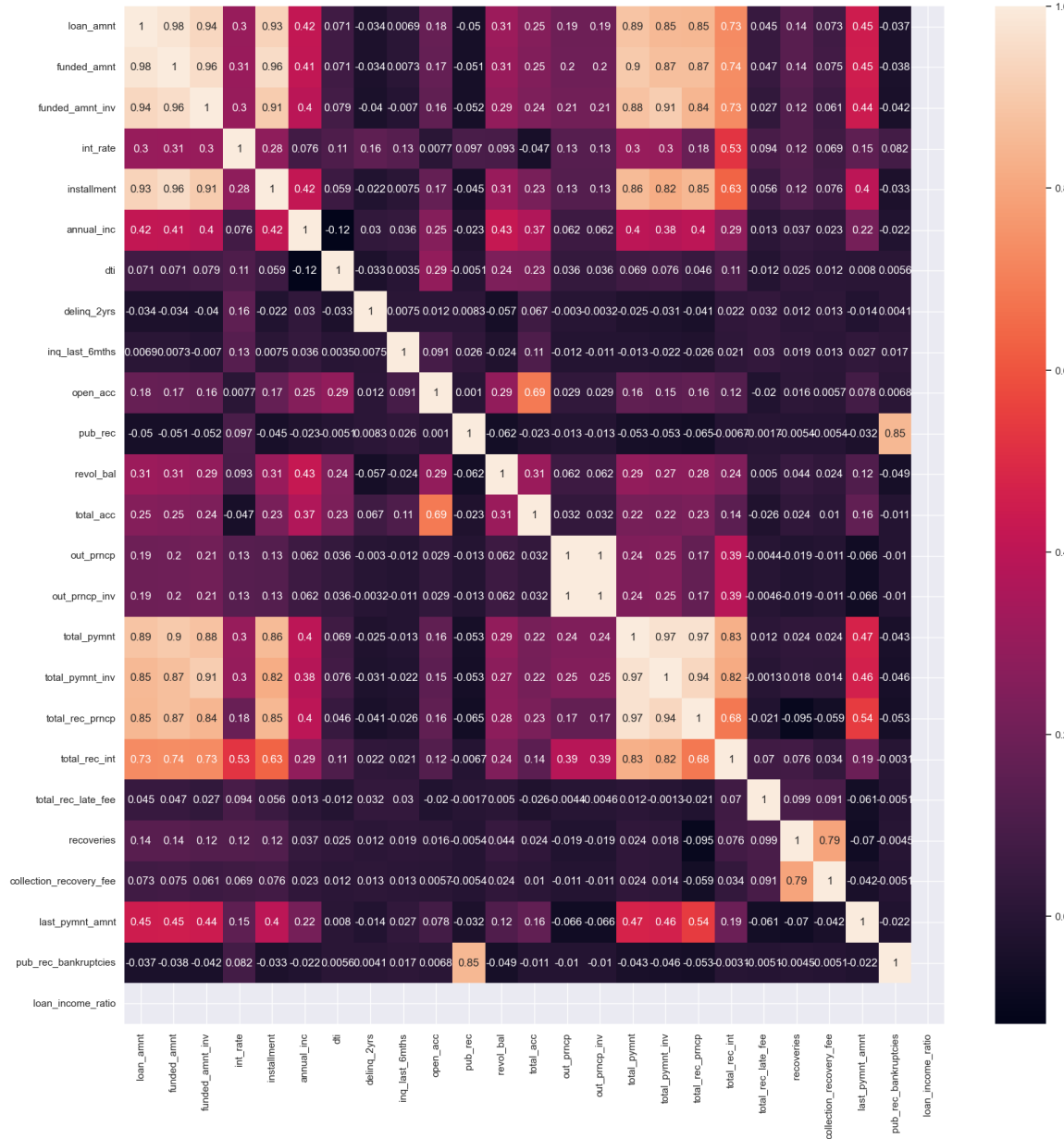
- The Average Income for people taking loans is between 40000 to 85000 annually.



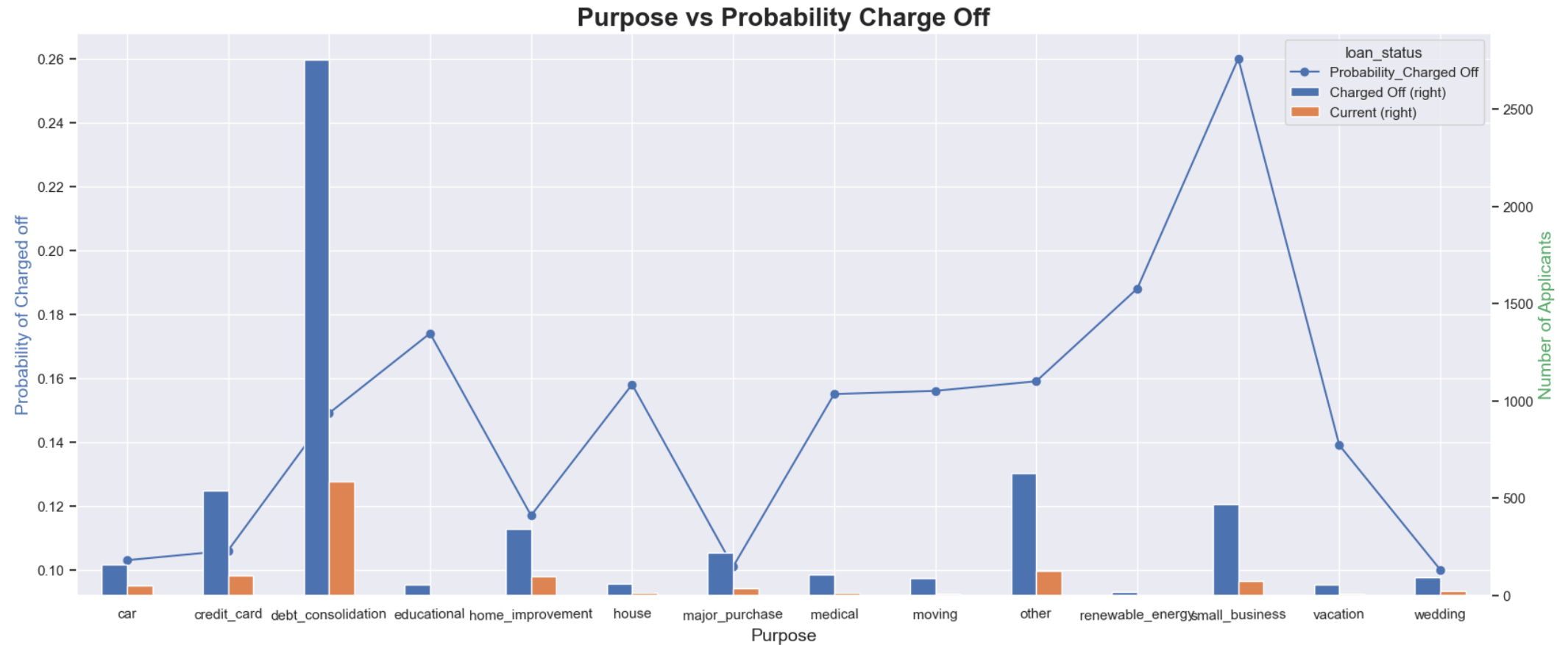
- About 2.87% applicants are charged off.
- About 47% people took loan to pay off other debts and loans.



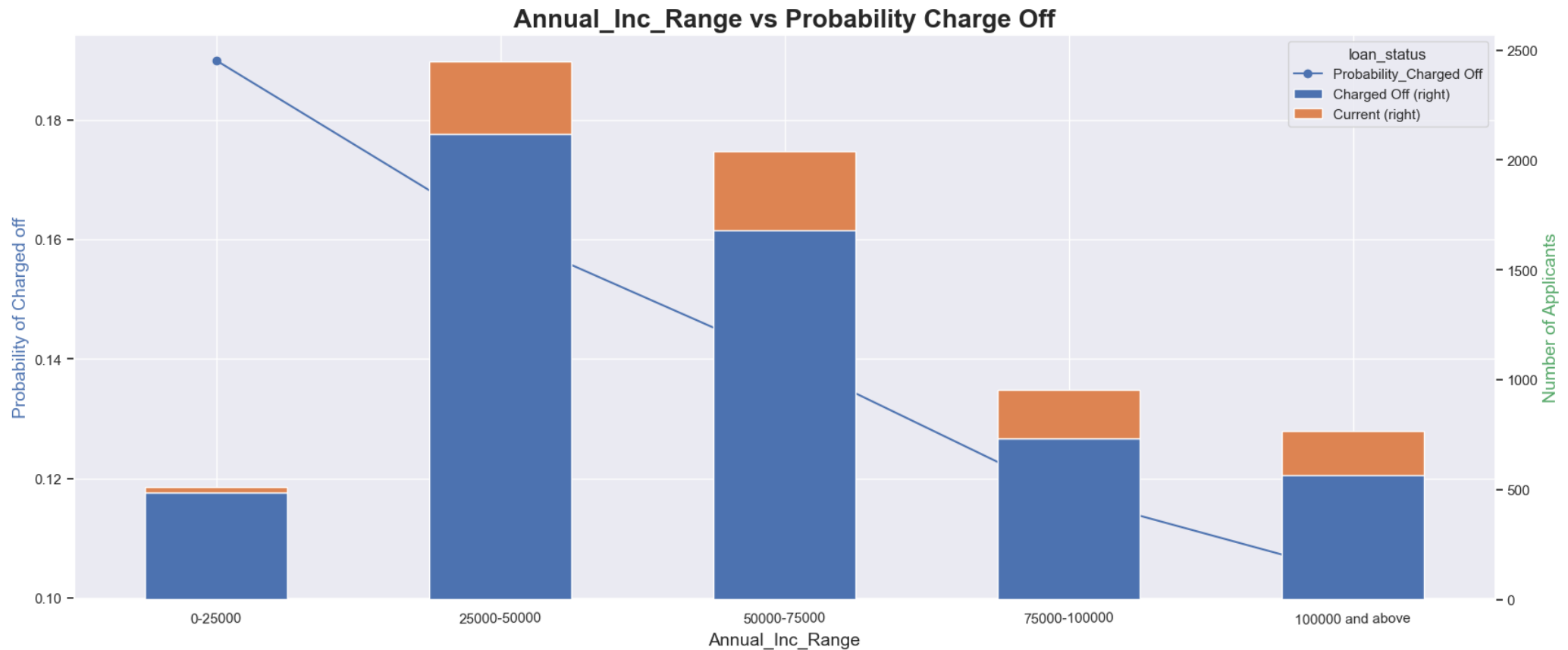




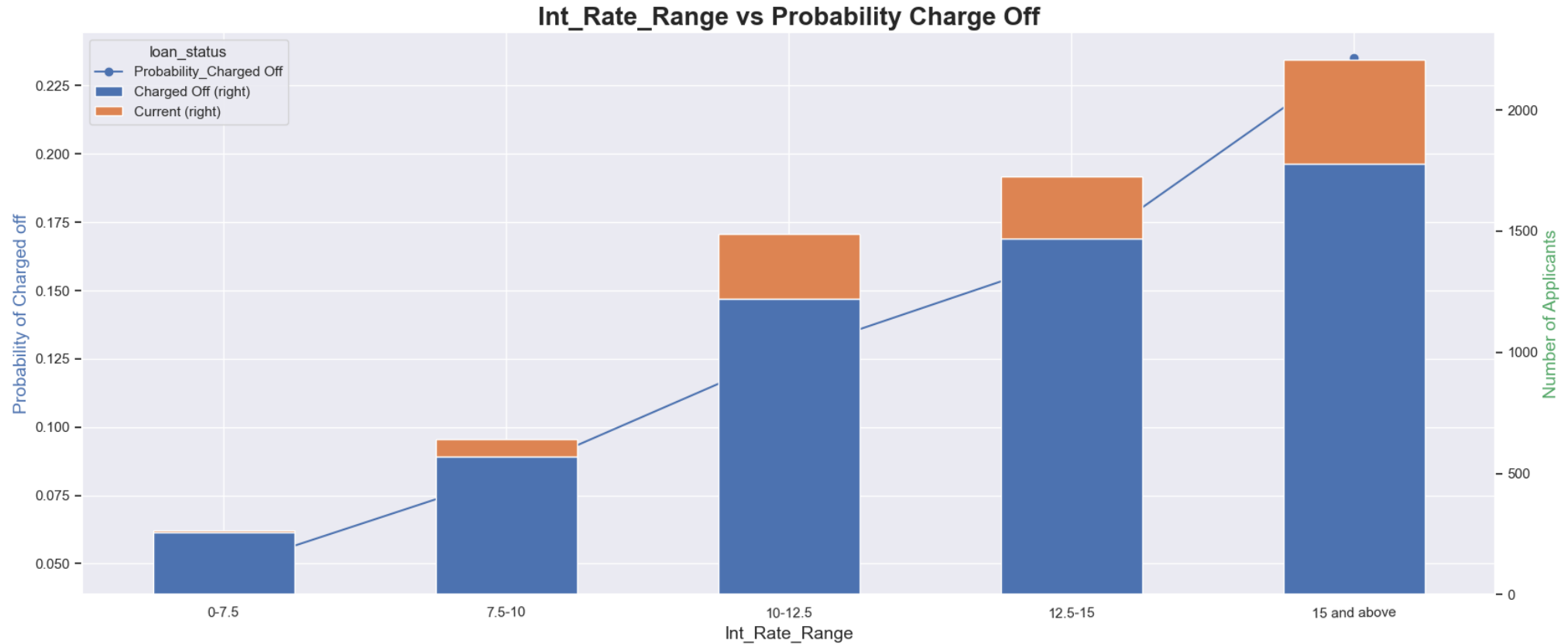
- It is clear from the Heatmap that 'loan\_amnt', 'funded\_amnt' & 'funded\_amnt\_inv' are closely interrelated.



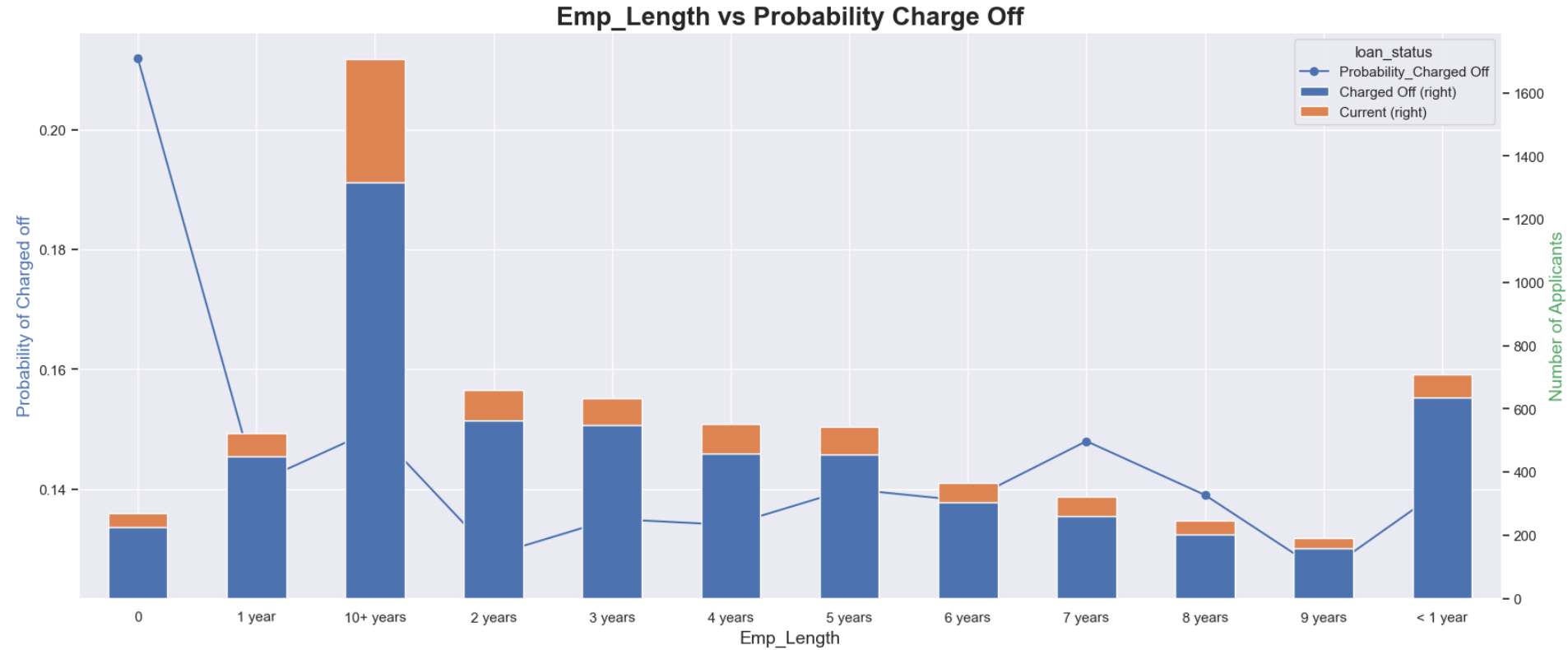
- Applicants who took loan for small business have the highest probability of charge off. A guarantee or asset should be taken while approving the loan for this purpose.



- Less annual income is indicating towards more defaulting in paying back ,percentage being 19%. Bank should consider this factor.



- As the interest rates are increasing so are the default rates, highest being at 15%



- Applicants who are self employed or employment < 1 year are more probable to default.

- *Lending club should reduce the high interest loans for 60 months tenure, they are prone to loan default.*
- *Small business loans are defaulted more. Lending club should stop/reduce issuing the loans to them.*
- *Borrowers with mortgage home ownership are taking higher loans and defaulting the approved loans.*
- *Lending club should stop giving loans to this category when loan amount requested is more than 12000.*
- *People with more number of public derogatory records are having more chance of filing a bankruptcy. Lending club should make sure there are no public derogatory records for borrower.*
- *Lending Club should check for the employment history of the person before issuing a loan as it increases the default rates, more prone to loan default.*