

Lending Club Case Study

Risk Analysis

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Background

- Lending club is the largest online loan marketplace, facilitating personal loans, business loans, and financing of medical procedures.
- Easy to access interface and lower interest rates are two distinguishing feature that attracts customer

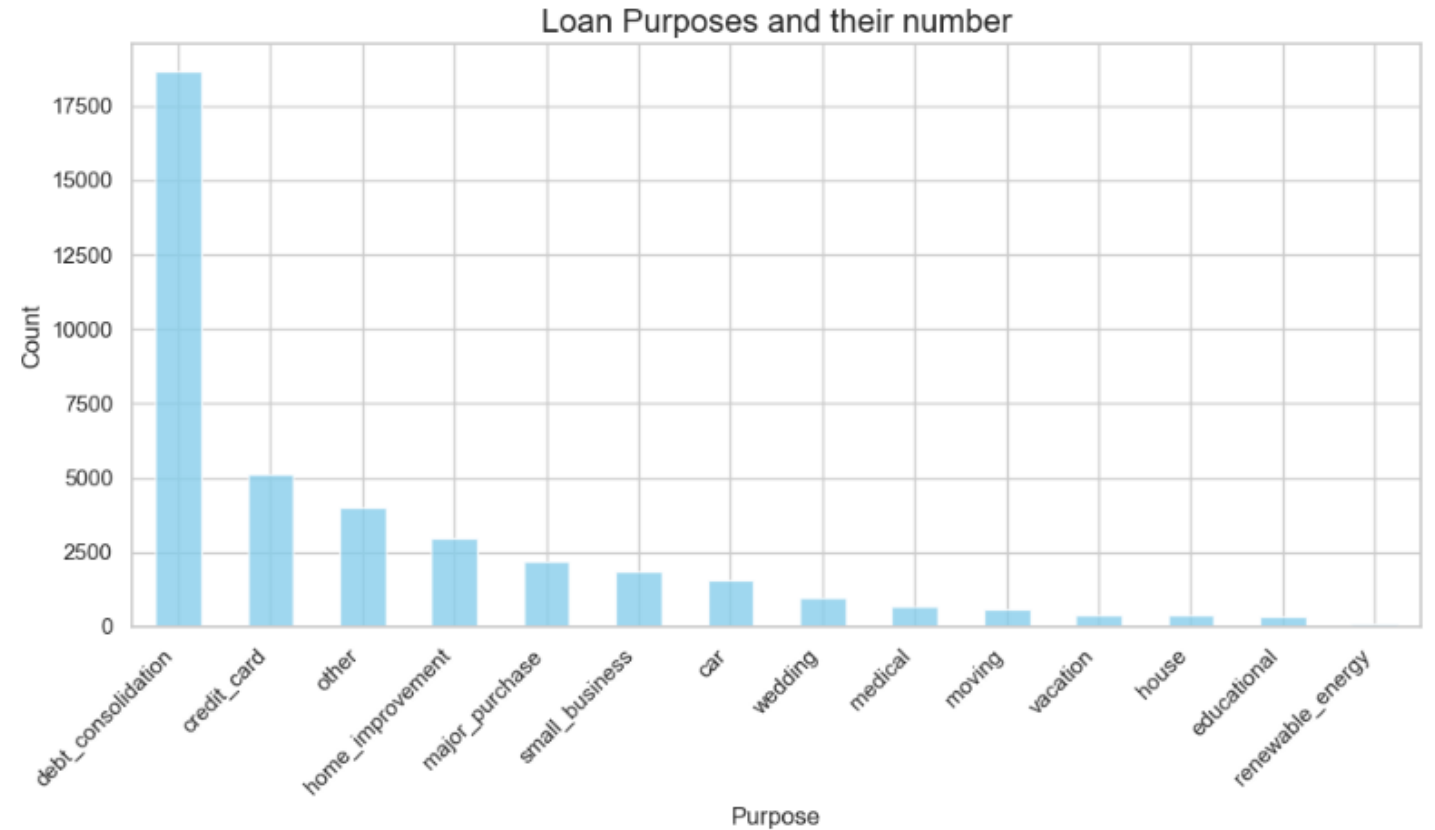


Objective

- To identify target variables which can significantly lead us to sort out potential defaulters.
- To help the company in identifying risky applicants to manage the portfolio and risk assessment

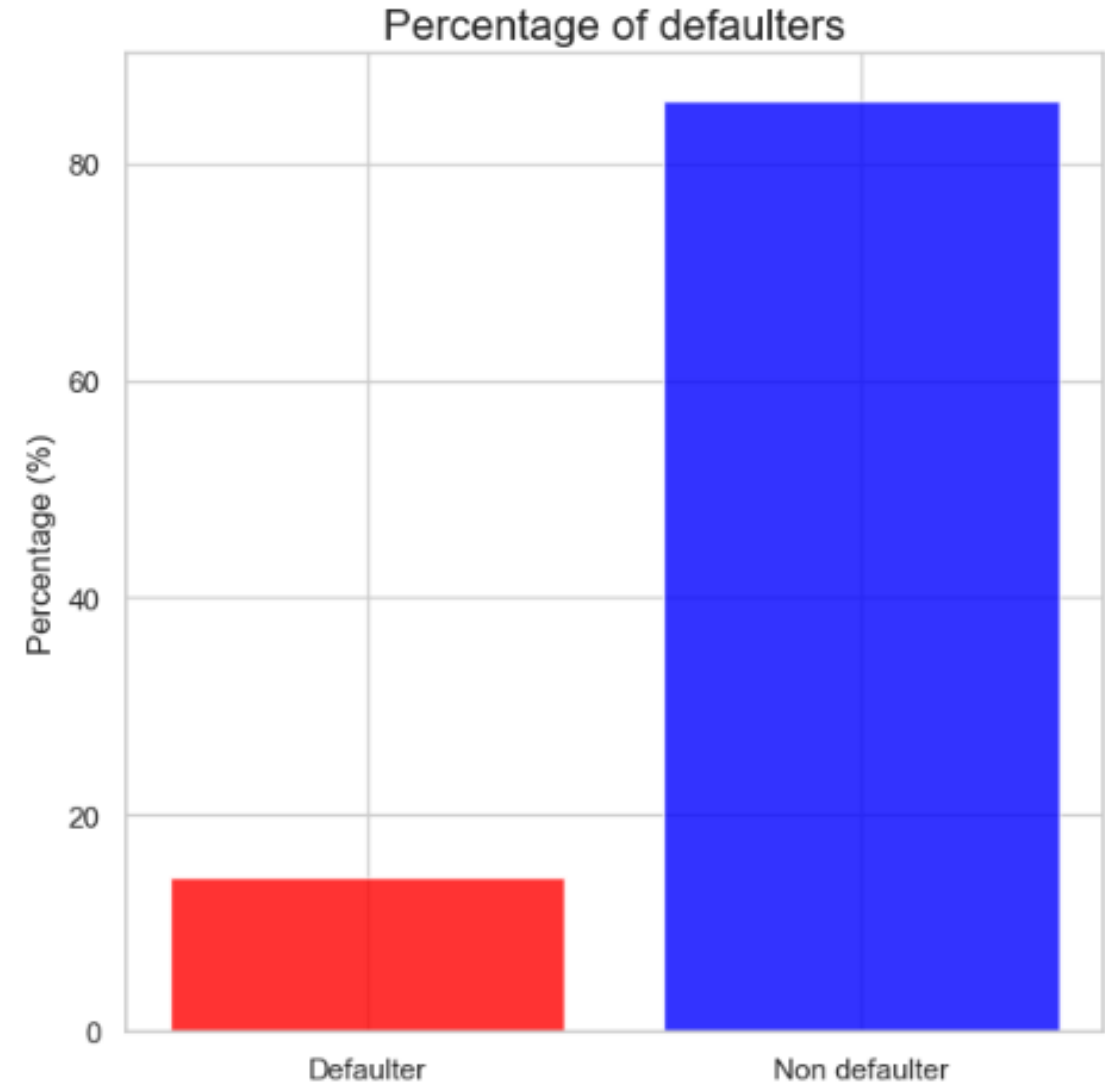
Data understanding

- Debt consolidation is the most common purpose of loan
- Renewable energy is the least common purpose of loan.



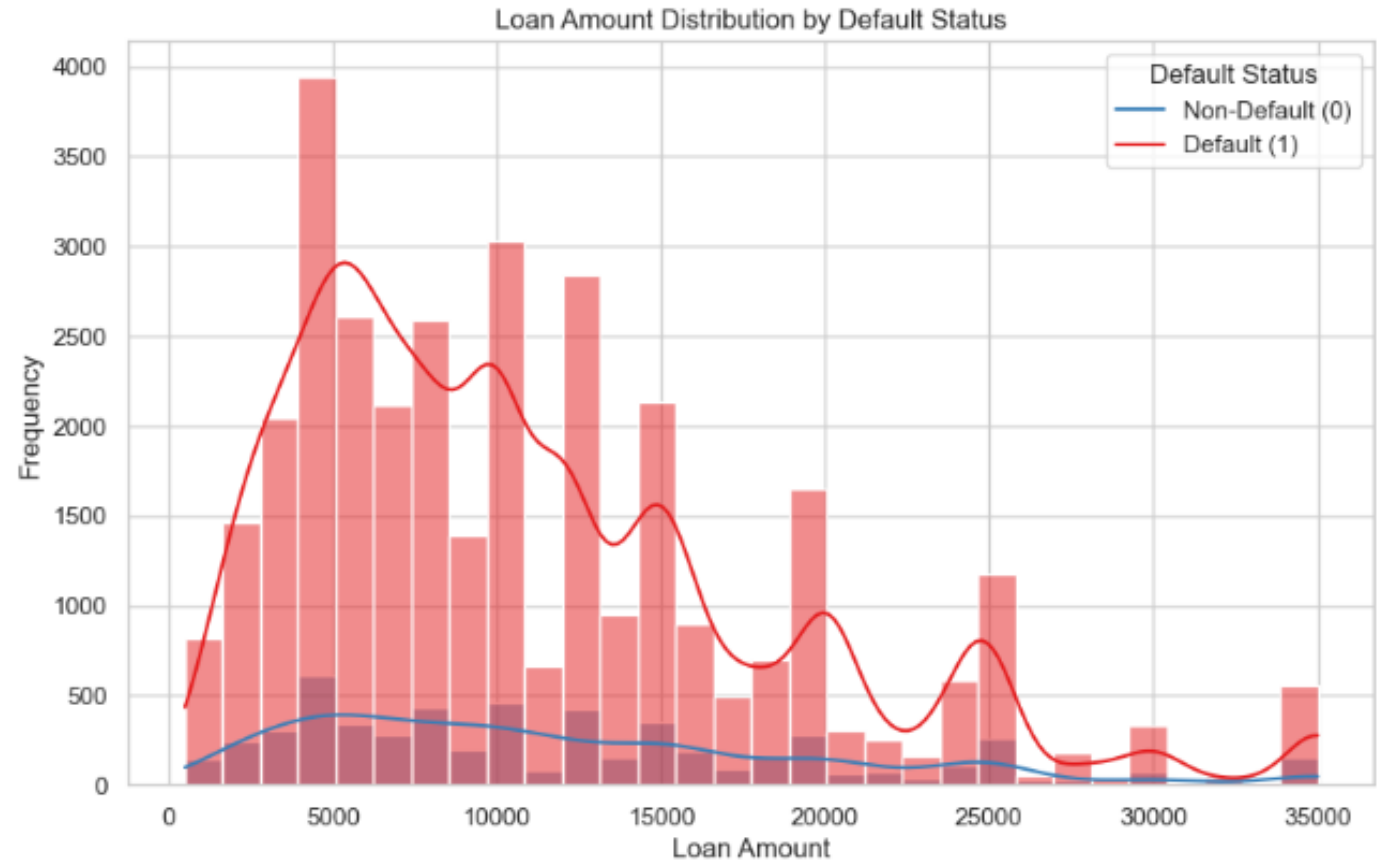
Default rate

- Highest percentage of customers(85%) are non-defaulters
- About 15% customers are defaulters.



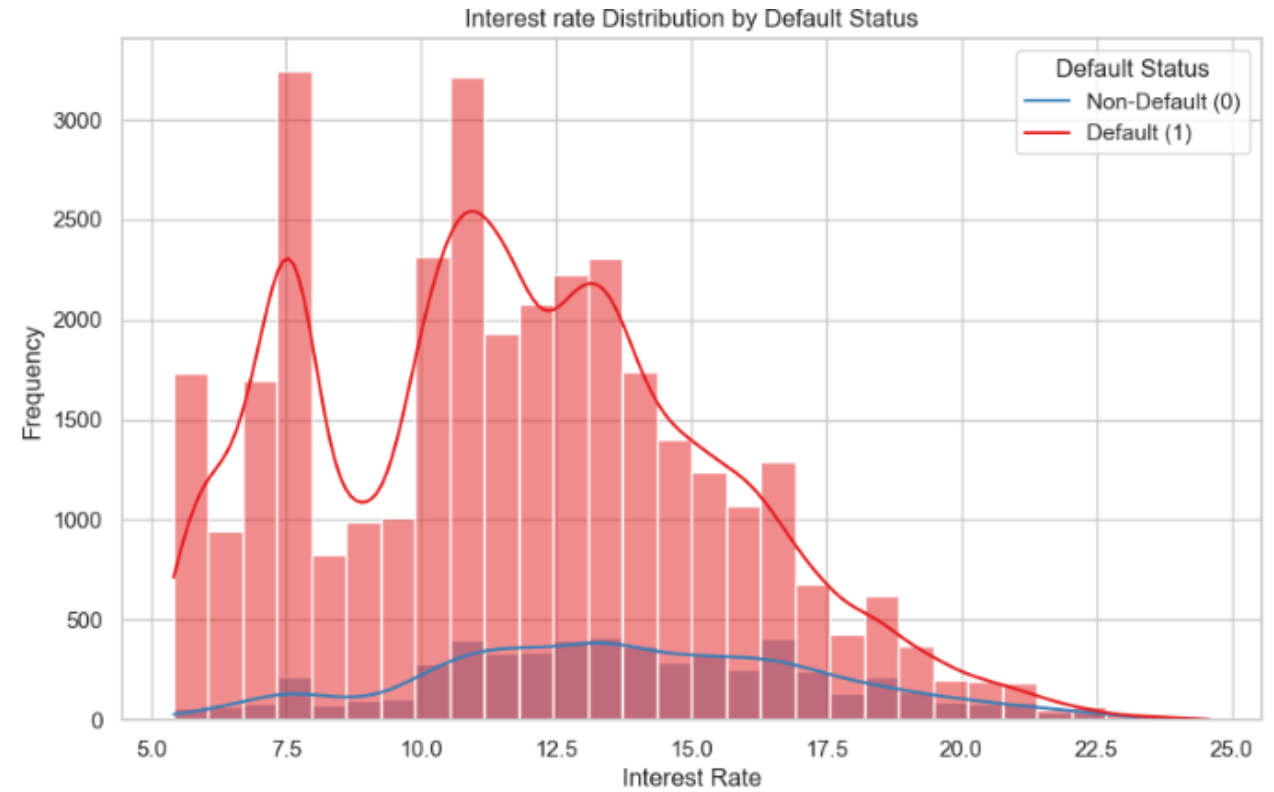
Loan Amount

- Defaulters tend to be taking higher loan amount.
- Higher the loan amount chance of getting defaulted is higher.



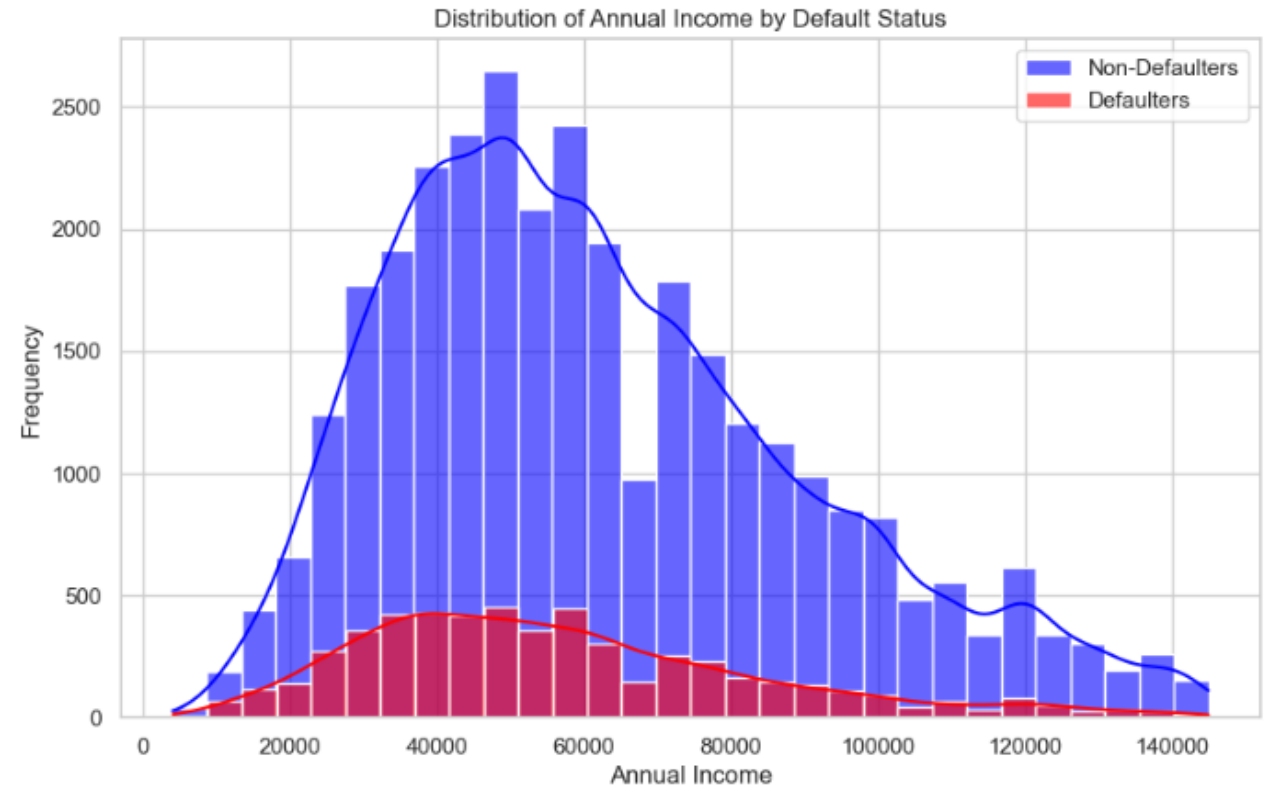
Interest Rate

- Defaulters tend to have a higher interest rate (12-13%)



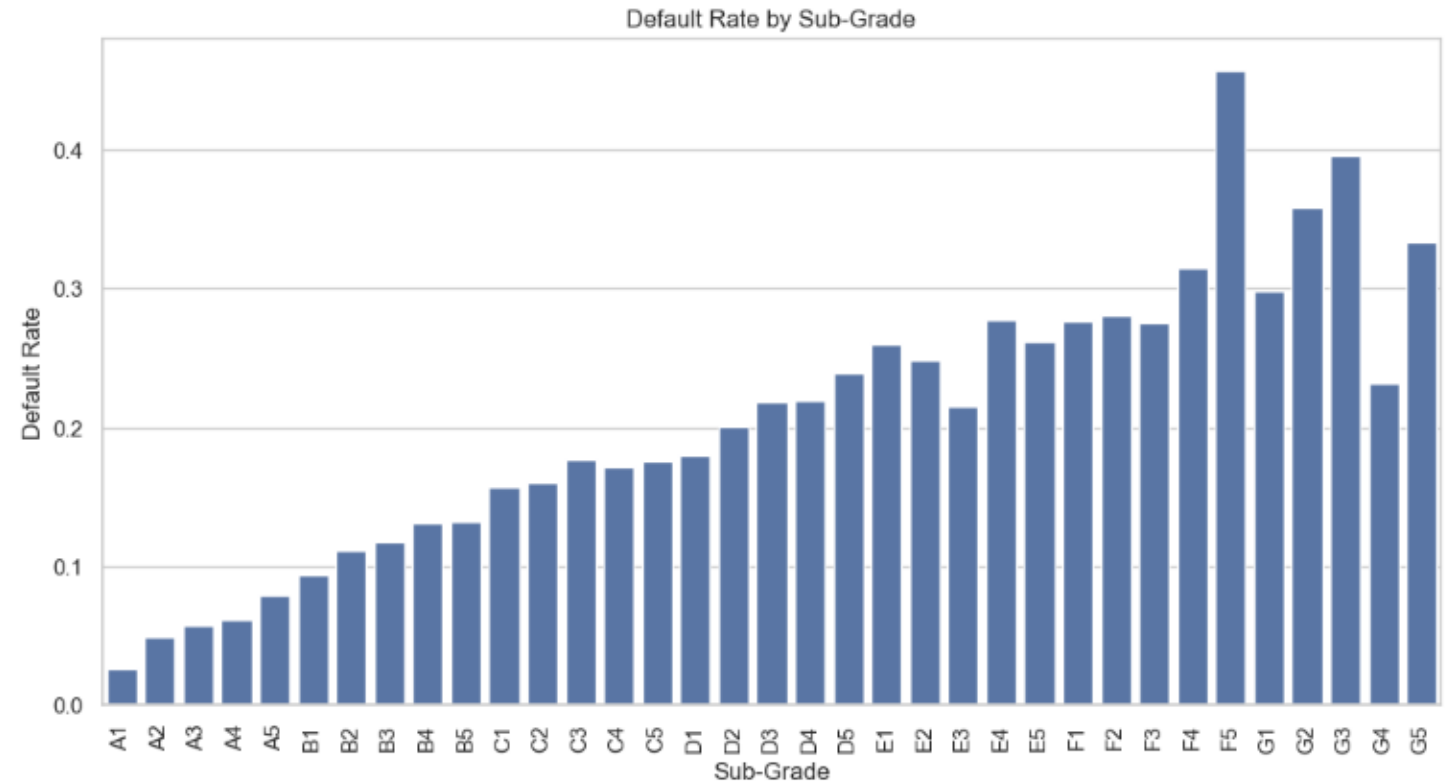
Annual Income

- Customers in lower income range 40000-60000 are the defaulter one.



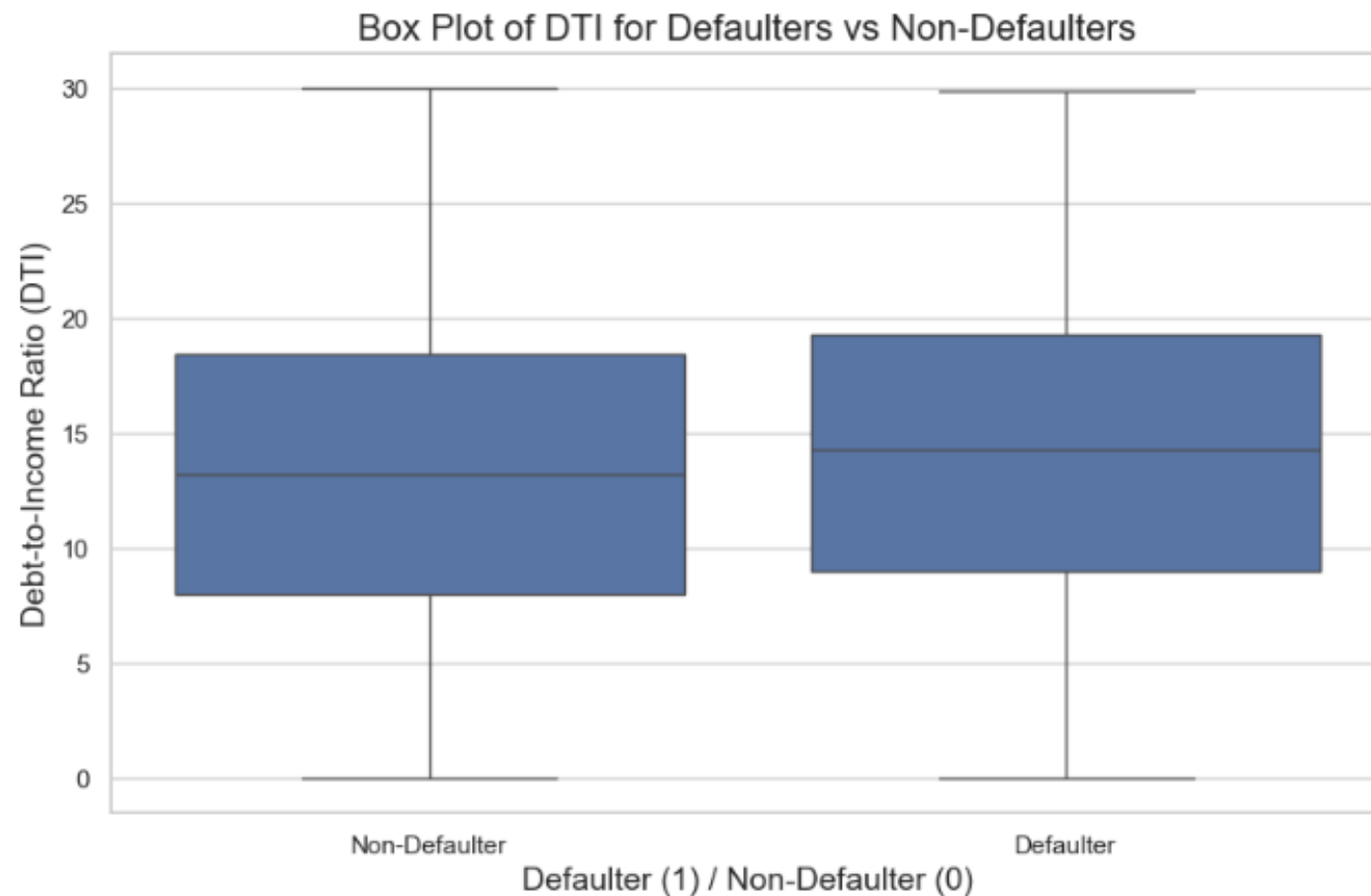
Sub grade

- Customers sub graded F5 are the highest defaulters.
- Customers with A1 are creditworthy customers



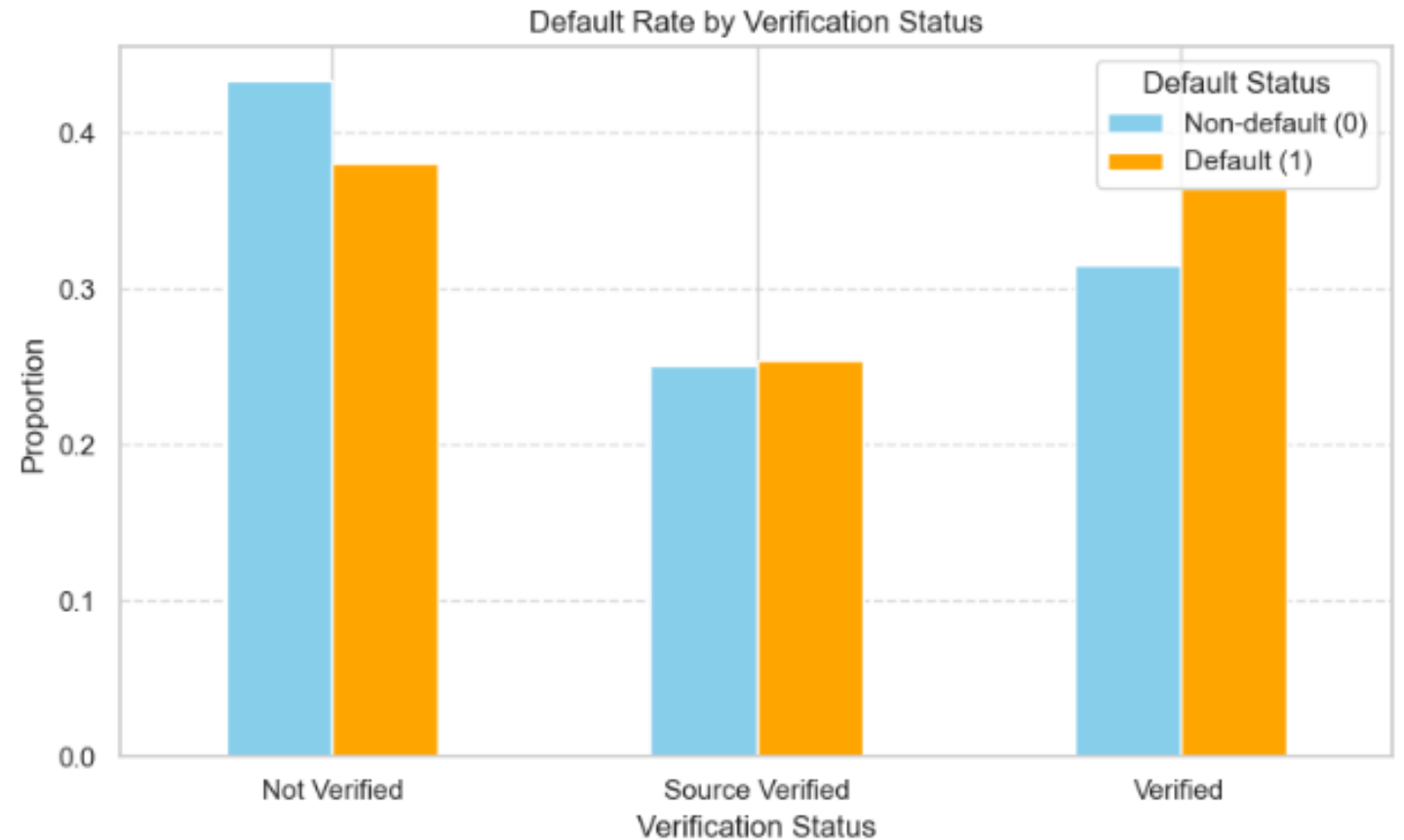
DTI (Debt to income ratio)

- Defaulter tends to have higher DTI hovering around 14% while for non-defaulters its around 13%



Verification Status

- It is clearly evident that verified customers are defaulters one.
- Verification seems to be not helping the company to improve credit loss.



Conclusion

- After analyzing various factors we found few insights which will help the lender to identify potential defaulter. All the variables/factors are summarized as below:
- Lower annual income tends to be defaulting more
- Higher DTI is likely an indicator of getting defaulted
- Defaulter tends to have a higher interest rate.
- Customers for whom verification is done are likely to be defaulted.
- Customers subgraded as A1 are the least defaulters and F5 are the highest defaulters.