

Lending Club Case Study

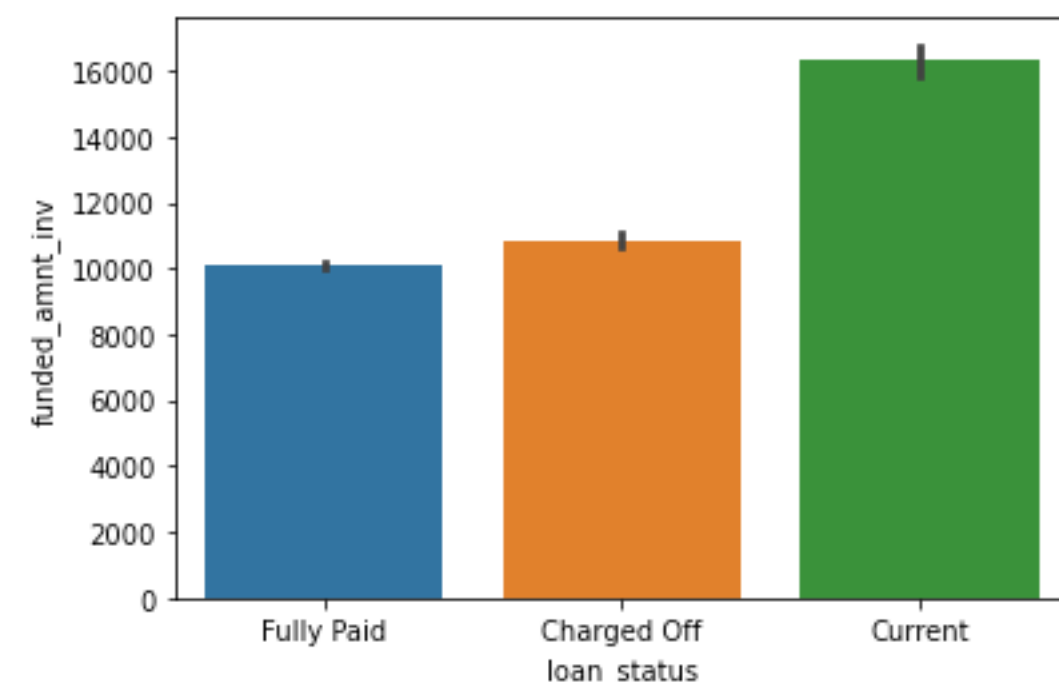
Sivakumar Soundarapandian

09-Feb-2022

Business Problem

- ◆ Lending Club is a consumer finance company which specialises in lending various types of loans to urban customers.
- ◆ The data about past loan applicants and whether they 'defaulted' or not has been provided.
- ◆ We will use EDA to understand how consumer attributes and loan attributes influence the tendency of default.

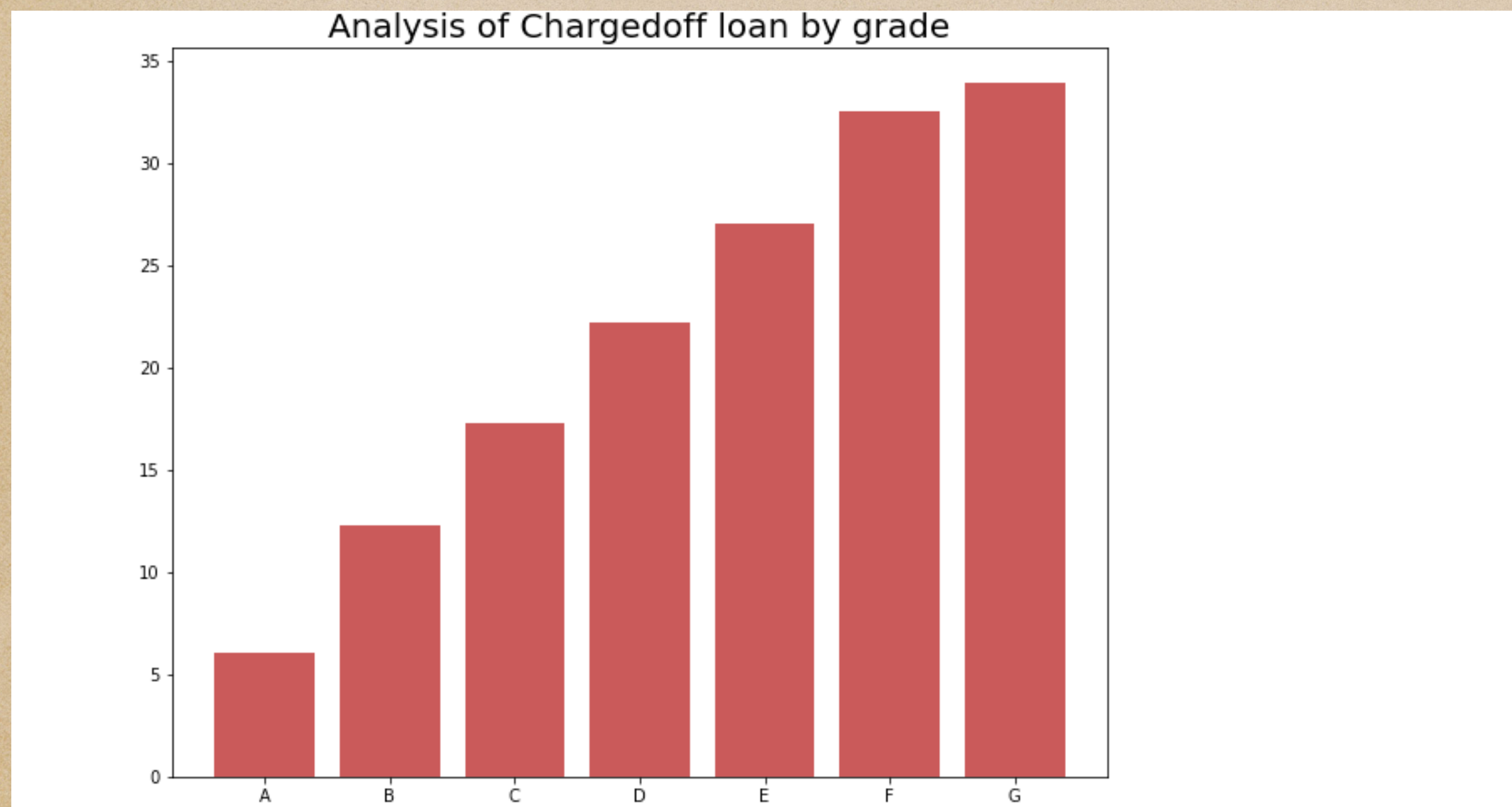
Data Analysis findings



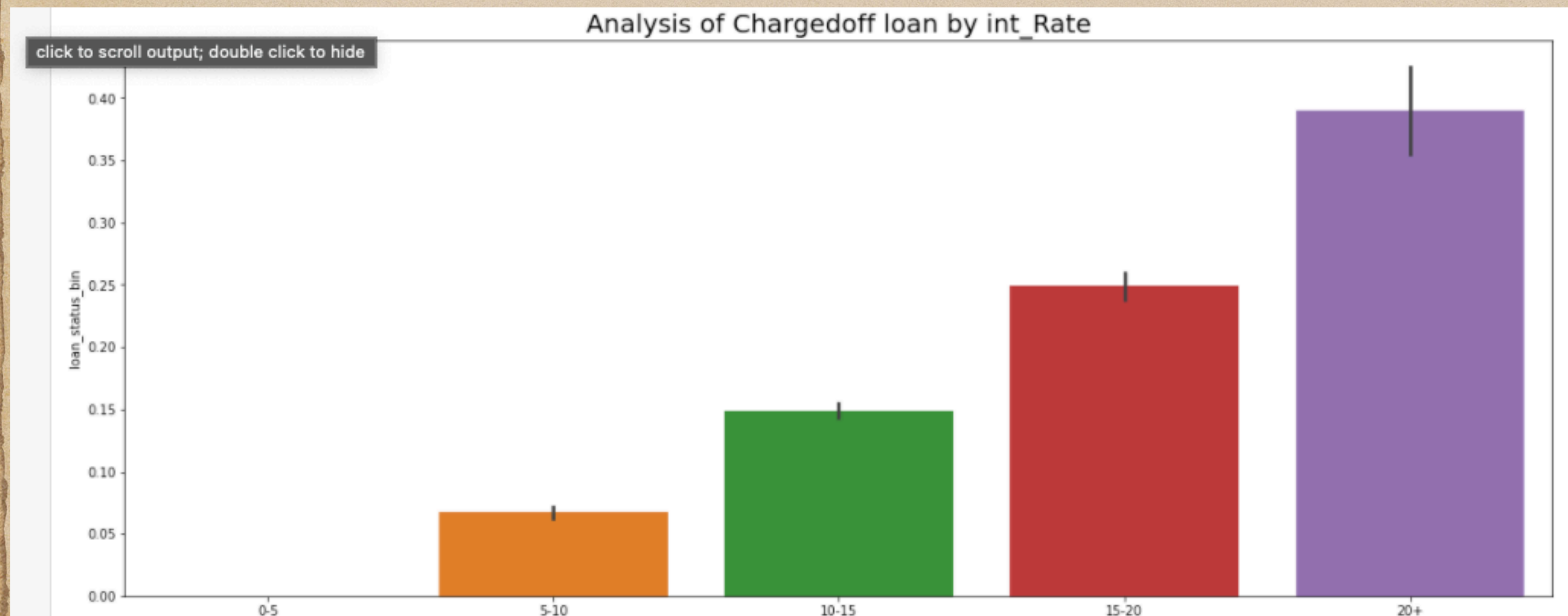
- ◆ The defaulted loan amount is slightly higher than the fully paid loan during the same period.
- ◆ This is a worrying trend as it impacts the bottom line of the company.

Impact of grade

- ◆ The loan grade has an impact on default
- ◆ As the loan grade decreases the % of default increases
- ◆ Recommendation to the business to put more controls around lower grade loans

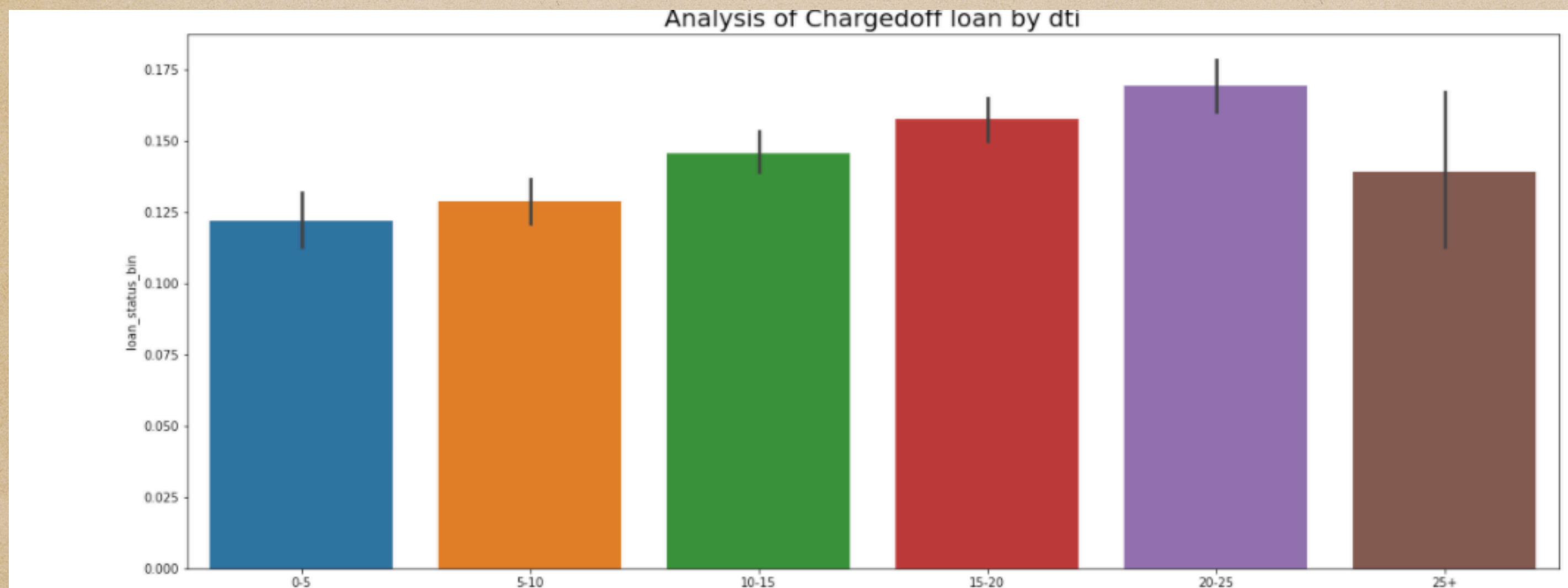


Impact of interest rate



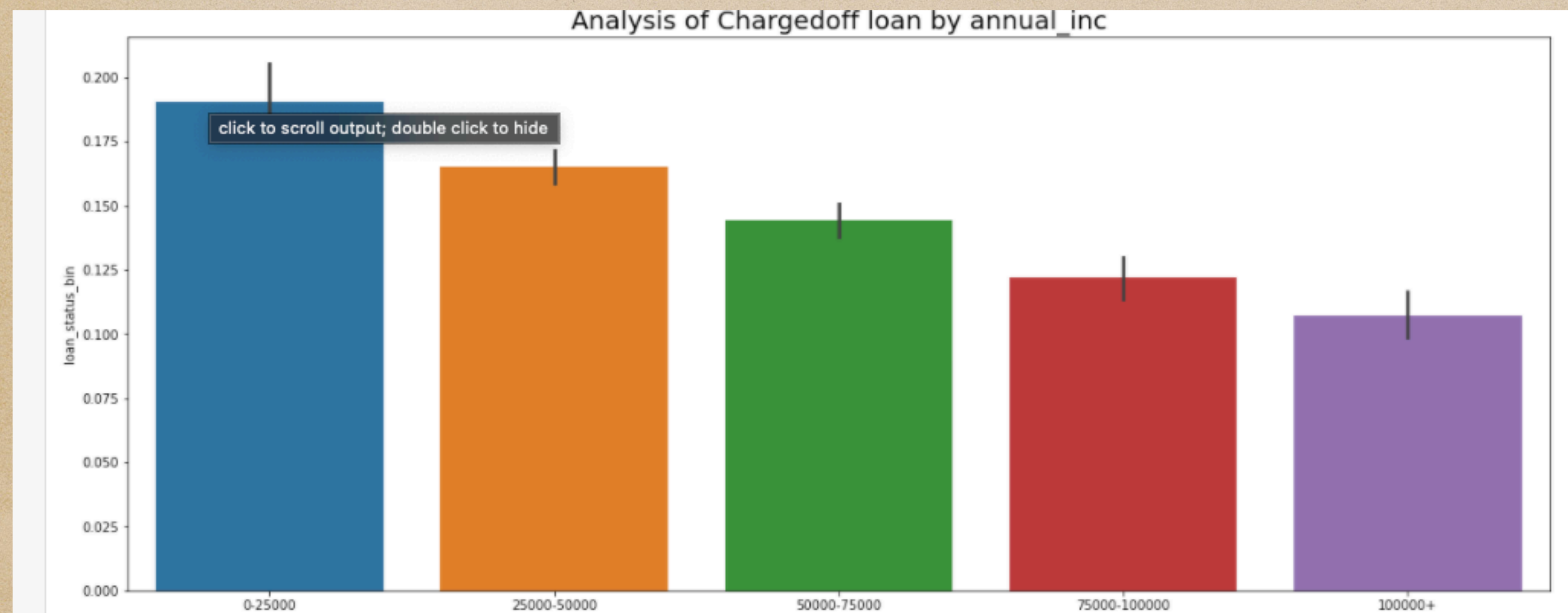
- ◆ The loan default increases as there is an increase in the interest rate
- ◆ Recommendation to put more controls around higher interest loans

Impact of Debt to Income



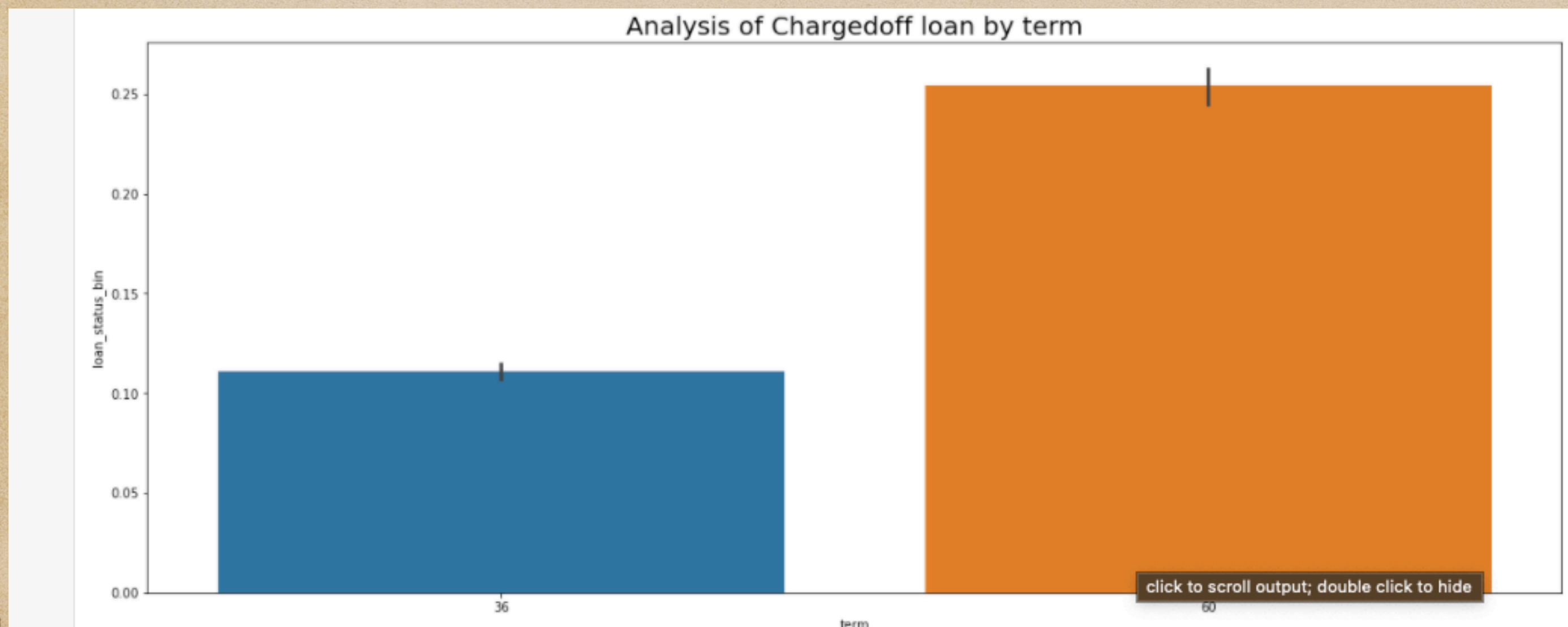
- ◆ The default increase as the debtToIncome increases
- ◆ Recommendation to reduce the risk or put more controls around loans with high debtToIncome

Impact of Annual income



- ◆ The default decreases as there is an increase in the annual income
- ◆ Recommendation to create more controls or reduce risk exposure to lower annual income loans

Impact of term



- ◆ The higher the term the higher the % of default
- ◆ Recommendation is to reduce the term for high risk loans

Summary

- ◆ The features that have high impact on default are
- ◆ Grade
- ◆ Debt to Income
- ◆ Annual income
- ◆ Interest rate
- ◆ Term of loan