Prosper Loan Data Analysis

Qi Meng

First Story Link:
https://public.tableau.com/views/ProsperLoanStory_0/Story1?:embed=y&:display_count=yes

Final Story Link:
https://public.tableau.com/views/ProsperLoanStoryfinal/ProsperLoanAnalysis?:embed=y&:display_count=yes&publish=yes

Summary

Loan Data from Prosper contains 113,937 loans with 81 variables on each loan, including loan amount, borrower rate (or interest rate), current loan status, borrower income, borrower employment status, borrower credit history, and the latest payment information. In this Analysis 19 variables will be selected.

Out of 113,197 of loans, 49.66% (56,576) of them are current loans, and 33.42% (38,074) of them are completed.

Loan Status	
Current	56,576
Completed	38,074
Chargedoff	11,992
Defaulted	5,018
Past Due (1-15 days)	806
Past Due (31-60 days)	363
Past Due (61-90 days)	313
Past Due (91-120 days)	304
Past Due (16-30 days)	265
FinalPaymentInProgress	205
Past Due (>120 days)	16
Cancelled	5

In order to better understand the borrower's rate, borrower's income range, employment status, occupation variables are being considered.

Occupation
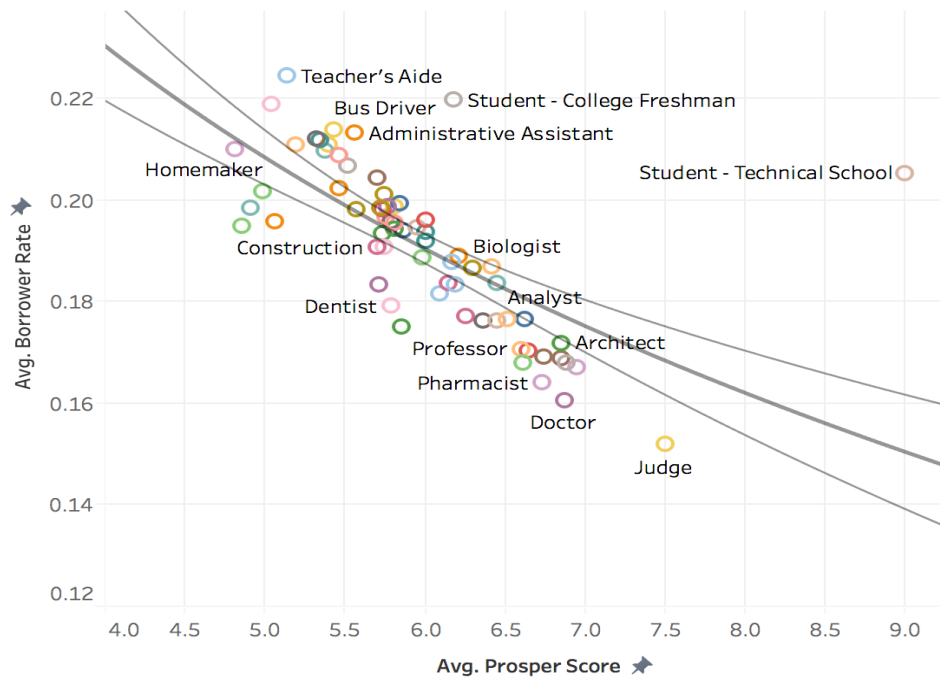
Students and middle class worker seem to have higher borrower rate, which have average borrower rate greater than 20%. However, professionals, such as Judge, doctor, pharmacist have relatively lower rates, on average less than 17%. Higher the Prosper Sore means a lower borrower risk level, and it is surprise to see that student in technical school with the lowest risk level, while having an above average borrower interest rate.

Similarly, as the following chart shows, employment status and income range also help to reduce the borrower's rate. The greater the circle, the greater the income, and employed borrower with higher income, on average, have much lower rate and lower income and not employed borrowers.

Avg. Borrower Rate

Median Loan Original Amount

"This is awesome. I really like what your visualized for the data, but it would be better to have a front page or an ending page to make it consistent."

Design

The story design is entirely focusing on analyzing Prosper loan data. Firstly, geographical distribution and loan status is presented to let the audience know the big picture of the loan data. Moving on, we are looking into the details of the loan applicants' interest rates. The loan interest rate is being analyzed by applicant's income range, occupation, and Prosper score(the risk level of the applicants).

Based on the feedback, I added the front page, therefore the whole story has a beginning.

Resources:

1. 8.2 Preview: Story Points
https://www.tableau.com/about/blog/2014/5/82-preview-tell-story-your-data-story-points-30761
2. Tableau Essentials: Calculated Fields - Logical Functions
https://www.interworks.com/blog/ccapitula/2015/04/01/tableau-essentials-calculated-fields-logical-functions

3. https://onlinehelp.tableau.com/current/guides/get-started-tutorial/en-us/get-started-tutorial-story.html