ProsperLoan Data Exploration

By Sarah Mitchell

Dataset

This data set of Prosper Loans has an abundance of information. The sections of the data I am interested in are Rates, APRs, Credit Scores, Terms, Income, Yields, Fees, and Loans Status. I want to see how they all correlate with one another. Does Prosper make a higher yield off of 'A' credit with more money borrowed or on 'E' credit with less money borrowed? What is the average amount someone may borrow? The only way to answer these questions is the explore the data.

Prosper's data set has 113,937 listing in it,with 81 variables on each loan. Some of these variables include loan terms, borrower APR and rates, lender yeild, and others. This data set contains the information to see if Prosper has a positive yeild on low income houses or how much the lower APRs really benefit Prospers yeild.

- Terms: 12 Months, 24 Months, 36 Months, 48 Months, 60 Months
- APR: 0.007, 0.156, 0.210, 0.284, 0.512
- Rates: 0.00, 0.134, 0.184, 0.250, 0.500

Summary of Findings

I found it interesting that the average credit scores 'B' and 'C' borrowers also had the average income of 25,000 - 75,000. I did the rates and income columns before looking at that. An unusual feature I found was the collection fees. I was surprised at the distribution of them. How there was plenty smaller and then it jumped to over 8,000. I want to look into the mount of charged off loans also to see if that is the factor in the collection fees.

The rates interested me the most. How the rates effect the yield and how the credt score effect the rate. You can see that the years the rates are high, the amount of money borrowered is lower. I also found it interersting that Prosper lends less money to borrowers with 'E' credit score, but Prosper has a much higher yield still than 'AA' credit score borrowing more money.

I saw that every credit score has the loan status from well paid to charged off. You can contiune to see Prosper profits on 'E' score borrowers more that 'AA' score borrowers. It looks like the 36 month term is the more popular choice. Although the loans with the term of 12 months has minimal defaults.

Key Insights

What I have disocvered in this dataset is that rates and fees are Prospers profit. The rates for 'E' credit score borrowers have a much higher yield than 'AA' credit score borrowers. This is true even though Prosper lends 'E' score borrowers less money. The majority of Prospers customers have average credit scores with average incomes. Prosper also makes a large portion of the profits off of fees. They have late fees, collection fees, interest fees and loan fees. They make a profit on all of the and on all borrowers from 'AA' scores to 'E' scores.