

Prosper Loan Data Visualization

Introduction

This dataset is financial dataset related to the loan, borrowers, lenders, interest rates. Prosper or Prosper Marketplace Inc. is a San Francisco, California based company specializing in loans at low interest rates to the borrowers. The dataset is comprised of 81 variables and contains 113937 entries.

Objectives

- Supplement statistics with visualizations to build understanding of data.
- Choose appropriate plots, limits, transformations, and aesthetics to explore a dataset, allowing you to understand distributions of variables and relationships between features.
- Use design principles to create effective visualizations for communicating findings to an audience.

Summary

- 1- First step taken was to get a general idea about the data and its structure.
- 2- Select the appropriate features to better answer targeted question.
- 3- Cleaning the selected features for proper investigation.
- 4- Using different types of exploration technique to get insight about data and answer the question. The exploration is divided into 3 analytical segments in increasing order of complexity: Univariate Plots, Bivariate Plots, and Multivariate plots.
- 5- Listing main findings about the selected dataset, as below:
 - Prosper loan listings are distributed according to the population of the US.
 - Most loan borrowers have annual income bracket of \$50000.
 - Most loans are of size between \$4000 and \$12000.
 - Interest rate increased constantly after 2008 recession up to 2011.
 - Homeowners have paid lower interest rates compared to non-homeowners.