Data Visualization Project: Create a Tableau Story

Links

Final_version

Summary

This project uses the Loan Data from Prosper dataset which contains information about 113,937 loans with 81 variables.

The analysis contains two dashboards, Economic Perspective and Investors Behavior, and one story, Economic Analysis. These dashboards convey that in 2008 the borrower's rate started to rise and only came back to this range in 2014. Also, the average loan amount decreased in 2008 and returned to 2007 values only in 2012. The average term, however, did not change during the sub-prime crisis, and it started to increase in 2011.

The number of investors also changed during the crisis. In the Investors Behavior dashboard, we can see that the number of investors started to fall in 2008 and also the average investment. In this period, we observe that the number of friends that funded the loans rose but the average amount that these friends invested was reduced. After the crisis, friends funded fewer loans, although the number of investors increased.

Design

I chose to analyze the data by quarter because it is easier to see what happened during the crisis. As I considered time in all of my graphs, I believe that lines are helpful to see patterns. In order to include one additional measure, I included bars because it makes easier to distinguish different measures. When considering two different measures in one graph, I chose opposite colors, so we can easily see the different patterns.

The feedback I received did not demand changes in colors or type of marks.

Feedback

My initial project had two stories: one that explained the impact of the crisis in the loans and the second that analyzed some characteristics of the borrowers, like state, income, and rating. The person who gave me feedback thought that the second story was not so good, he did not understand the visualizations easily. So I decide to exclude that second story and keep only the first.

He had some doubts about my graphs and asked me to change some things: 1) inform that the average loan amount and the average investment are money. Then, I inserted a $ sign in the axis; 2) he wasn't understanding the time axis because it was in continuous mode, so there were only quarter 2 of each

year in the graph. To solve this, I changed the dates to discrete and changed the orientation of the dates to "up". Now, you can see clearly all years and quarters.

Questions

- What do you notice in the visualization?

All the visualizations has a time perspective;

- What questions do you have about the data?

I am not sure the interest rate (APR) is correct. It seems a very small number;

- What relationships do you notice?

In the beginning of the crisis, people started to perceive what was happening and the loan amounts were reduced. Also, the interest rate started to rise.

- What do you think is the main takeaway from this visualization?

The fall of the amounts borrowed during the crisis.

- Is there something you don't understand in the graphic?

Yes, I think it will be helpful to specify the measuring unit in the axis. For example, include in the axis that investment is measured in dollars.

Resources

I used only my notebook notes to create these visualizations.