Introduction

Covered Bonds are a type of investment that is popular in Europe, with some markets, like Germany and France, having more than 300 Billion Euros in bonds outstanding as of the year 2019. This type of bond was first issued in Brazil in late 2018, after the approval from the Brazilian Central Bank.

Covered Bonds consist of a portfolio of real estate contract assets, which serve as a guarantee for the investments to be offered to clients of financial institutions. Basically, when you invest in a Covered Bond, such paper is guaranteed by the receivables of a real estate financing contract. In case of default of the institution, the investor can be paid using these receivables.

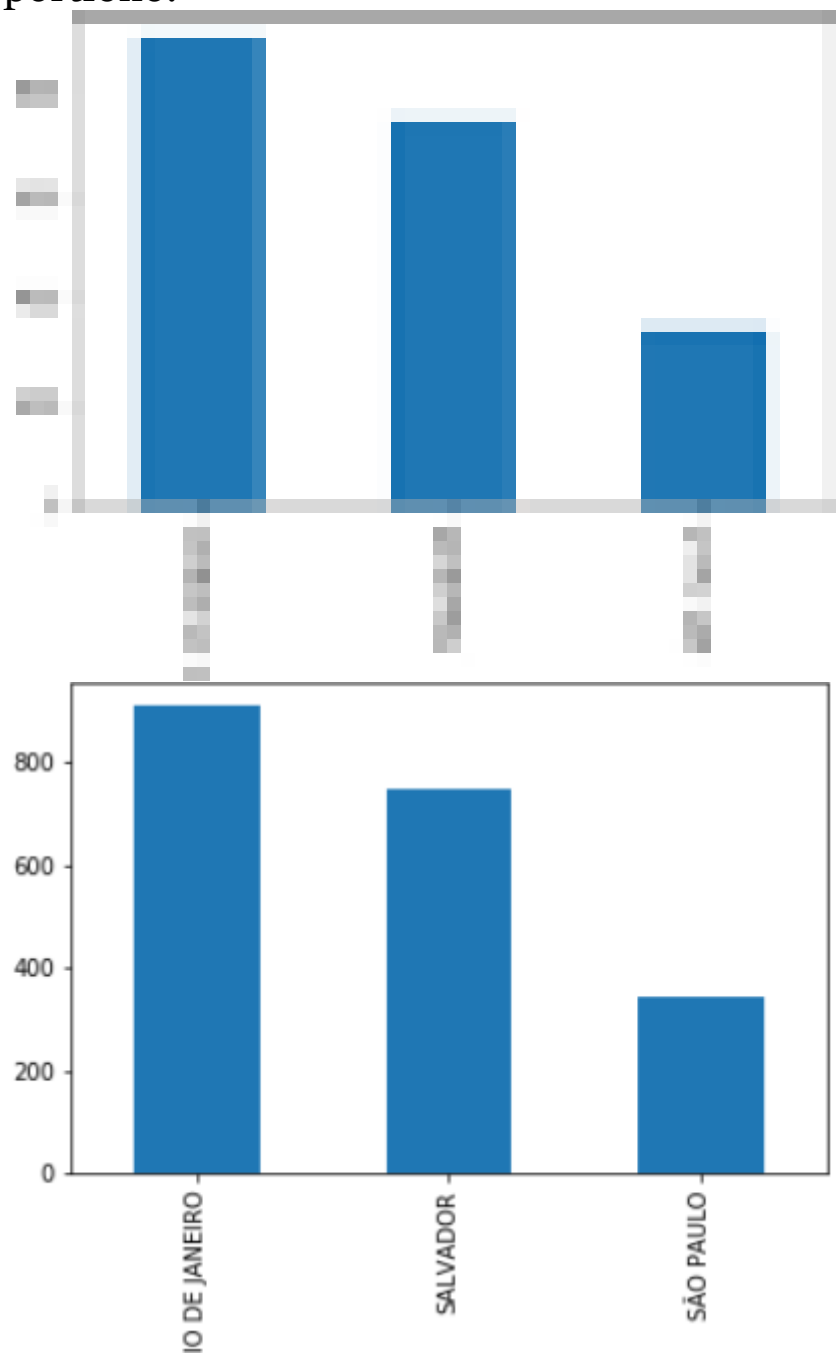
All contracts under the issuing of a Covered Bond have to be manually verified by a third-party company hired to oversee the whole operation, called the Fiduciary Agent. This agent will evaluate every contract and tell the financial institution if such contracts are good for being part of the asset portfolio.

The problem here is that some contracts are rejected, and we want to gather data from this — is there any city with more contracts rejected? Maybe the reasons for the rejection are different based on the city?

Describing the data

The data that will be used here is a fictitious (even though I work for a Fiduciary Agent company, I cannot and will not use real data for the purposes of this work) spreadsheet of

the contracts that are candidates of composing the asset portfolio.



Using the plot function for a bar graph, we can see facilitate the visualization.

This spreadsheet includes the reference number of that contract, the city from where this contract comes from, and the status, which informs us if the contract is ok to he be included under the asset portfolio, or if it was rejected (and why, in this case).

CITY	STATUS	
RIO DE JANEIRO	OK	0.427214
	REJECTED - PAGES MISSING	0.023012
	REJECTED - SIGNATURES MISSING	0.005503
SALVADOR	OK	0.351676
	REJECTED - PAGES MISSING	0.015508
	REJECTED - SIGNATURES MISSING	0.006003
SÃO PAULO	OK	0.158579
	REJECTED - PAGES MISSING	0.009505
	REJECTED - SIGNATURES MISSING	0.003002

Here are the results of the analysis using the crosstab funcion.

Conclusion

Using crosstab, we can compare the percentages of each type of status for each city. Judging by these results, we can conclude that there are no cities with a considerably higher number of Rejected occurences than others. Also, as verified above, the number of Rejected occurrences can be considered small next to the contracts with OK status.

The above study was conducted in order to have a better knowledge if there is any city with a really higher incidence of Rejected contracts in comparison to other. After such analysis, considering that all three cities have lower than 3% of rejected contracts (closer to 2%), we can infer that no city has a considerable number of Rejected contracts, so the operation might continue as usual, without the Fiduciary Agent having to interfere or communicate anything to the financial institutions involved.