# Why was my application for the paycheck protection program rejected?

## Background

The Paycheck Protection Program was put in place in 2020 to provide small businesses with loans to help them maintain payrolls. Among the millions of received applications, some were rejected for various reasons. Datasets constantly published by the Small Business Administration (SBA) give information about businesses applications that were approved and those that were rejected. Unfortunately, reasons for dismissing applications are not provided. The datasets provider requested help with determining potential reasons for loans dismissal.

## Preliminary Data Analysis

Looking closely at the data, it can be identified that there is a possible relationship between the removal and the servicing lander state. The datasets clearly show that the probability for an application to be approved is higher when Georgia is the servicing lender state. Administrative procedures can be an explanation. There is also a potential relationship between the amount of the loan, the number of jobs retained, and the decision about the application. In fact, the application might have a great chance to be dismissed when the ratio of loan amount to jobs retained is under the state average.

## Way forward

For ethical reasons, information related to race and demography were removed from the datasets. To have a better understanding of the process leading to the approval or the rejection of loans, we need to have access to additional data. For example, the dismissal might be related to the educational level or the economic status of the applicants.