

Check for racial biases on mortgage loans in USA

Problem statement formation : Check if there is any racial disparity on mortgage loans in US by checking interest rate and/or loan amount to mortgage value ratio for ten years data from 2009 to 2019.

Context : After the 2008 Housing Crisis, the US government introduced a law by which every bank in the US needs to publicize their mortgage loan data each year. We are interested in finding out if there is any discrimination on mortgage loans evaluation in coloured communities. We are particularly interested in the interest rate on african american mortgages and approved loan amount to mortgage value ratio. We can look for more questions during the EDA part of the project.

Criteria for success: The criteria for success of this project is to identify any racial malpractices by any bank or banks in any particular colored areas by identifying factors like interest rate and loan amount compared to mortgage values. We may also want to predict quotes by using customer's financial, ethnic, racial information. We may also want to see if there is any change in the status-quo of the mortgage loan approval rate and evaluation of mortgage in the communities of colour by each year.

Constraints : The data that will be used in this project only contains mortgage loan data after 2009 so our conclusion from this project will not be applicable to years before 2009 and hence we can not make banks accountable for there malpractice and neither we can conclude anything on the timing of the conception of malpractices ,if there is any.

Stakeholders : Stakeholders of this project may be some law enforcement agencies, auditors, rating companies (like Moody's), human rights organizations etc.

Data sources :

<https://www.fhfa.gov/DataTools/Downloads/Pages/FHLBank-Public-Use-Database-Previous-Years.aspx>

