Real estate - PGP Project :

Problem Statement:

A banking institution requires actionable insights into mortgage-backed securities, geographic business investment, and real estate analysis.

The mortgage bank would like to identify potential monthly mortgage expenses for each region based on monthly family income and rental of the real estate.

A statistical model needs to be created to predict the potential demand in dollars amount of loan for each of the region in the USA. Also, there is a need to create a dashboard which would refresh periodically post data retrieval from the agencies.

The dashboard must demonstrate relationships and trends for the key metrics as follows: number of loans, average rental income, monthly mortgage and owner's cost, family income vs mortgage cost comparison across different regions. The metrics described here do not limit the dashboard to these few.

Dataset Description

Variables Description

Second mortgage : Households with a second mortgage statistics

Home equity: Households with a home equity loan statistics

Debt: Households with any type of debt statistics

Mortgage Costs: Statistics regarding mortgage payments, home equity loans, utilities, and property taxes

Home Owner Costs: Sum of utilities, and property taxes statistics G

Gross Rent: Contract rent plus the estimated average monthly cost of utility features High school Graduation: High school graduation statistics Population

Demographics: Population demographics statistics

Age Demographics: Age demographic statistics Household Income: Total income of people residing in the household Family Income: Total income of people related to the householder

https://public.tableau.com/profile/anand.jha#!/vizhome/RealEstateProject-1_16079454561380/RealEstateDashboard

Data Reporting:

2. Create a dashboard in tableau by choosing appropriate chart types and metrics useful for the business. The dashboard must entail the following:

   a) Box plot of distribution of average rent by type of place (village, urban, town, etc.).

   b) Pie charts to show overall debt and bad debt.

   c) Explore the top 2,500 locations where the percentage of households with a second mortgage is the highest and percent ownership is above 10 percent. Visualize using geo-map.

   d) Heat map for correlation matrix.

   e) Pie chart to show the population distribution across different types of places (village, urban, town etc.)