

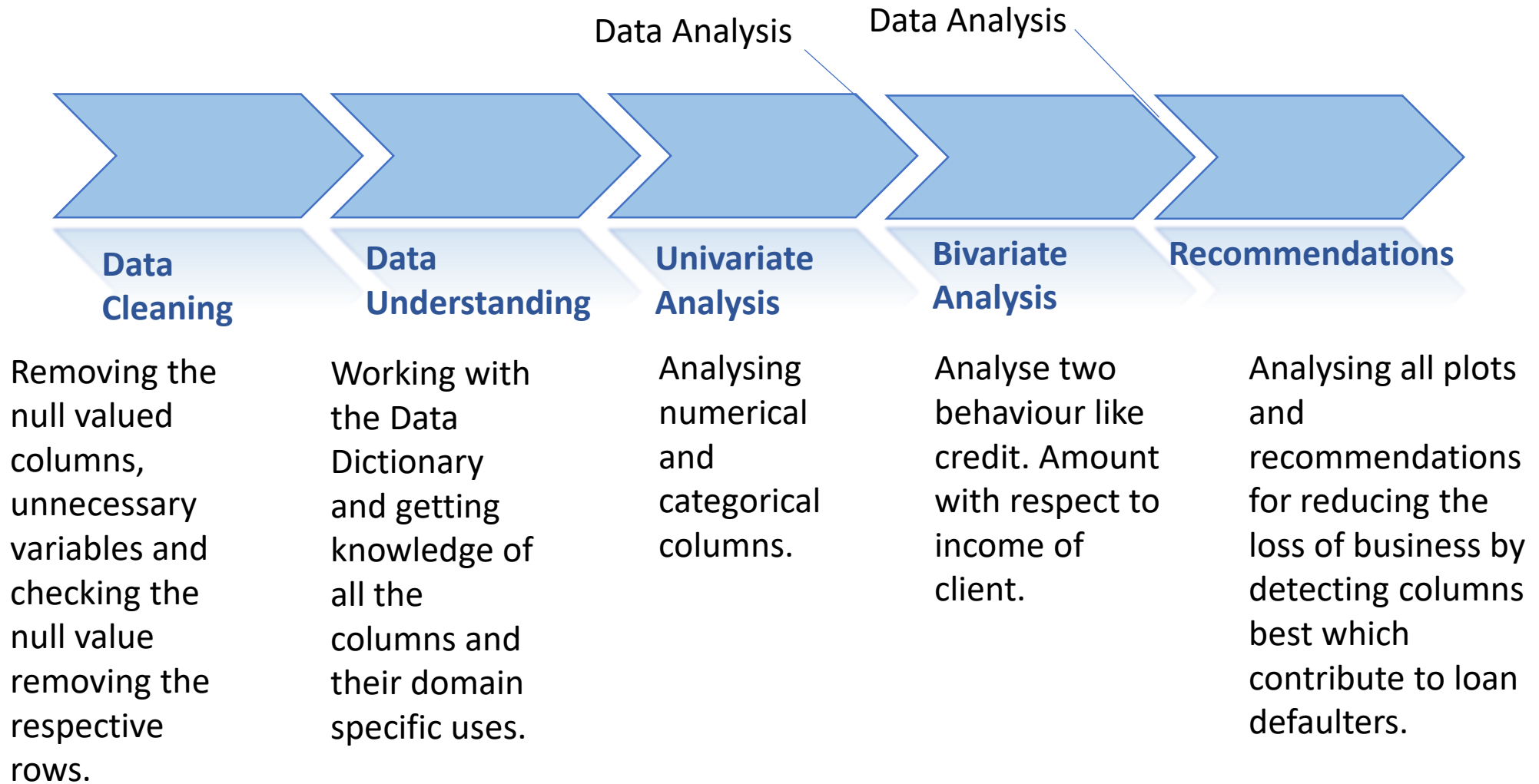
CREDIT EDA CASE STUDY

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Abstract

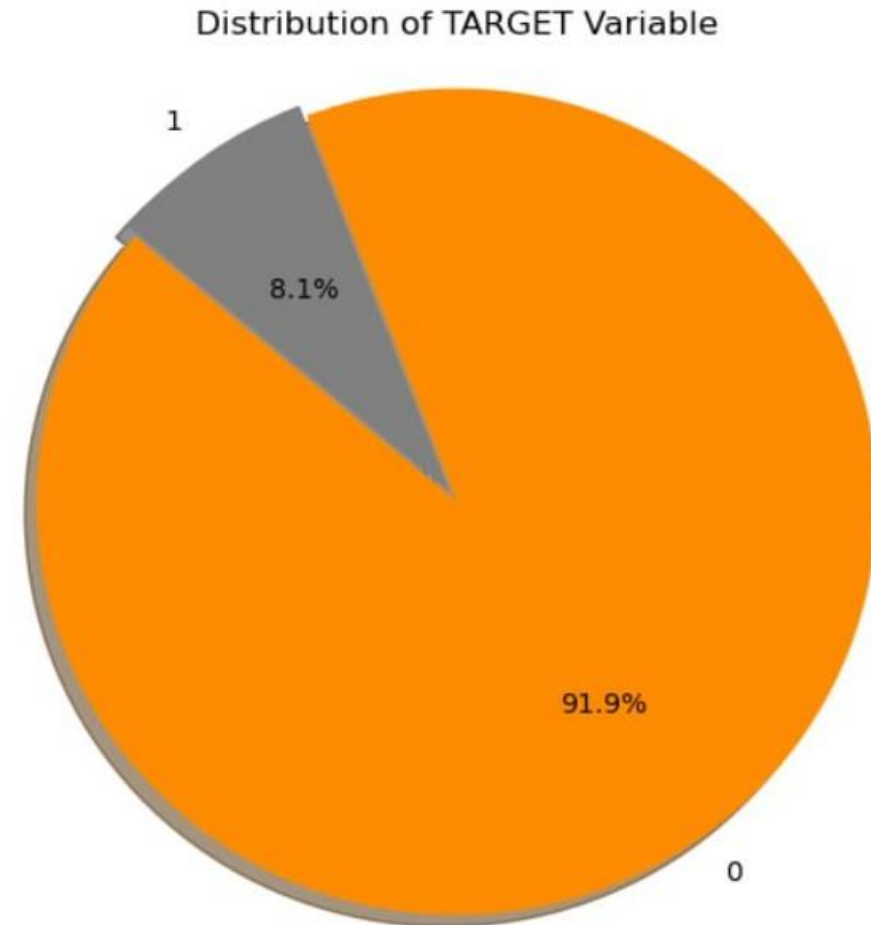
- The loan providing companies find it hard to give loans to the people due to their insufficient or non-existent credit history.
- The objective of analysis is to find driving factors (or driver variables) behind loan default, i.e. the variables which are strong indicators of default.
- To ensure that the applicants capable of repaying the loan are not rejected.

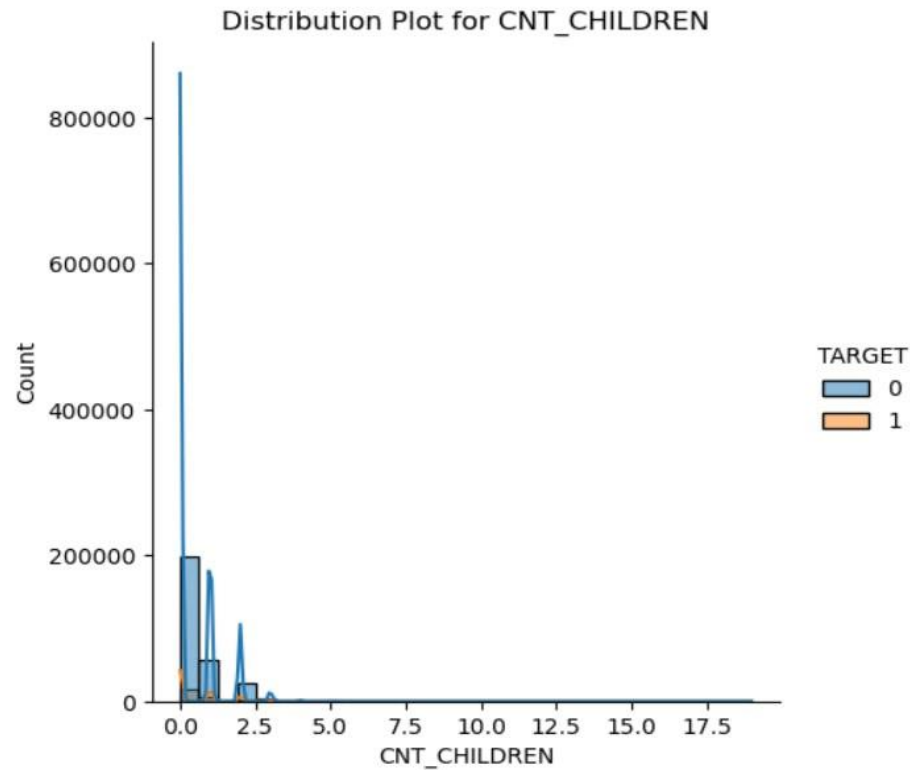
Problem Solving Methodology



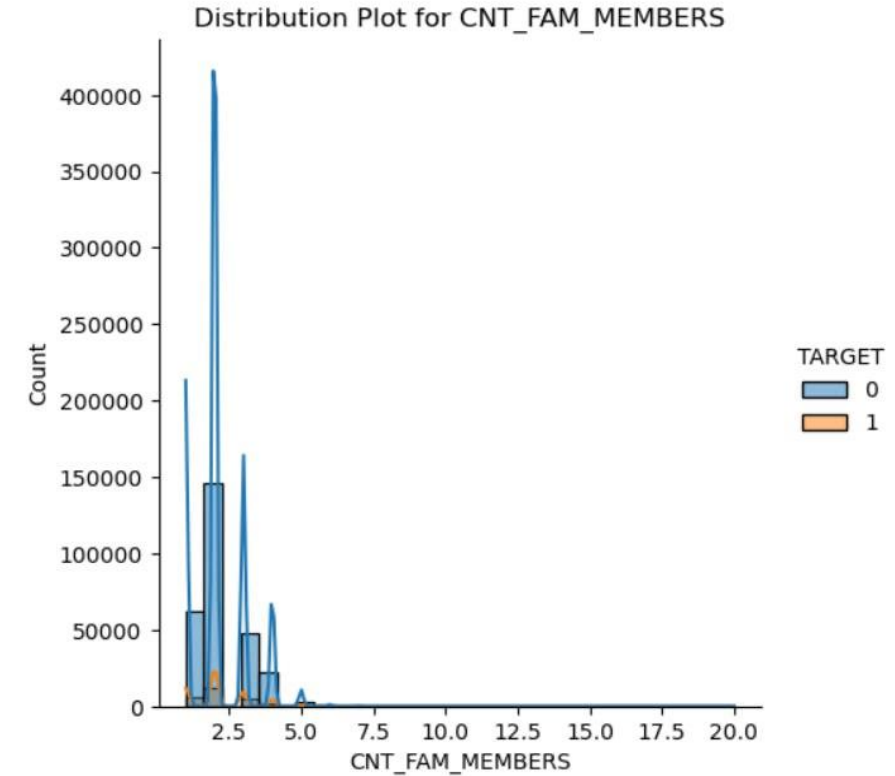
Distribution of TARGET Variable

- Imbalance Ratio is 11.387.
- 1 in every 11 client is a defaulter.
- Target 0 means Non-Defaulters.
- Target 1 means Defaulters.



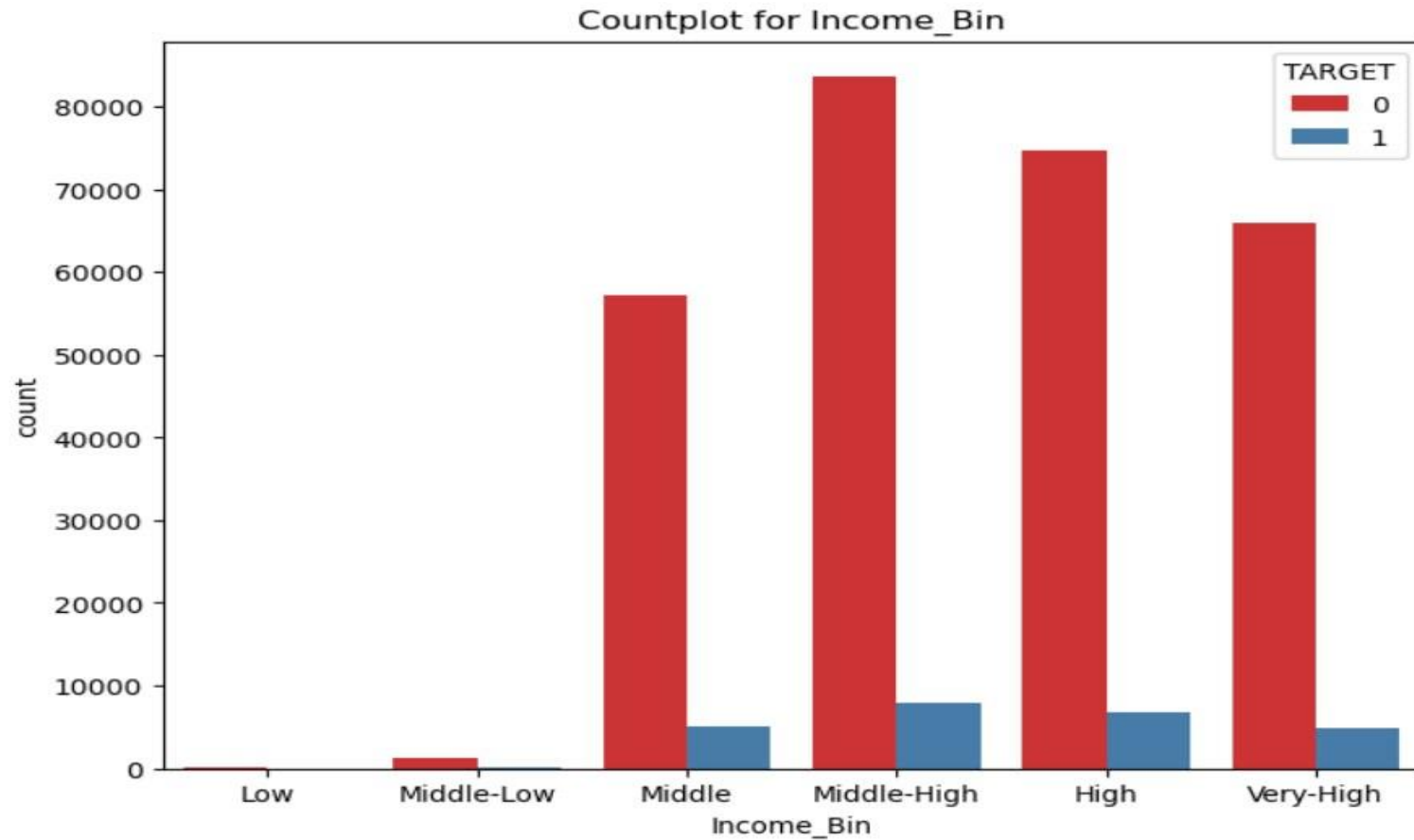


Most customers applying for loans have 0 children's.



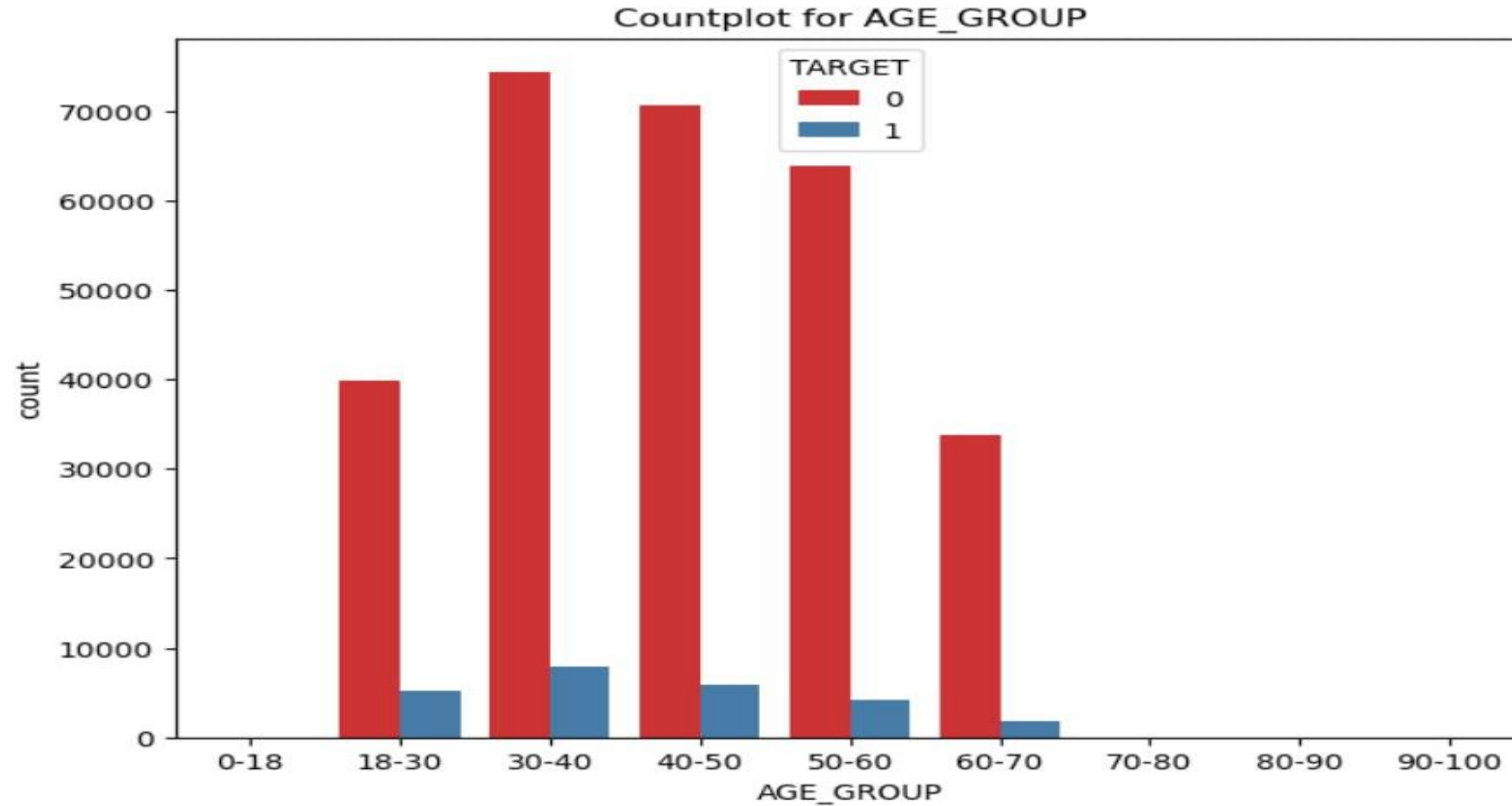
Client with upto 3 family members applies more for loan.

Univariate Analysis



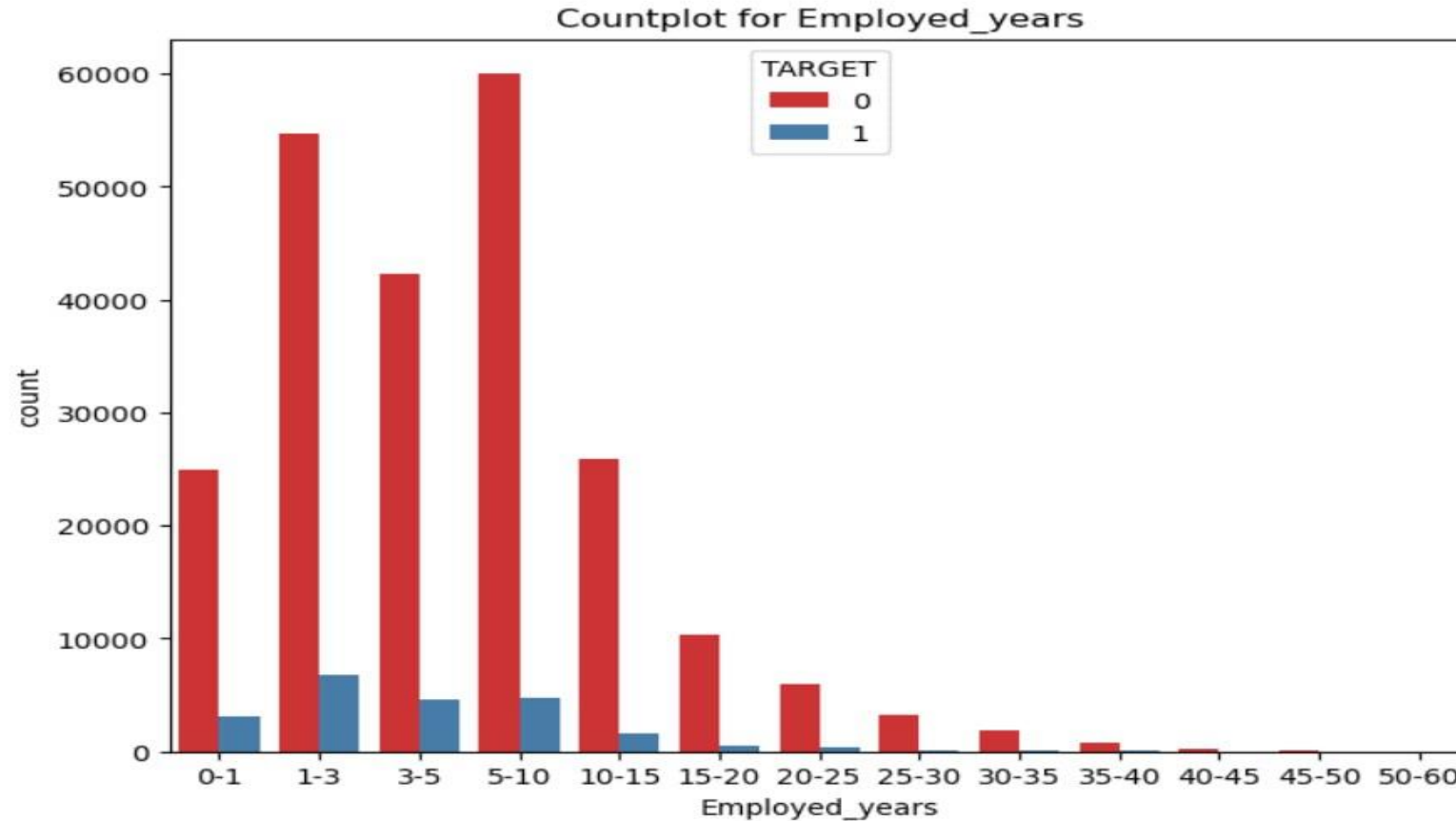
Most clients are from middle-high income group applying for loans.

Univariate Analysis



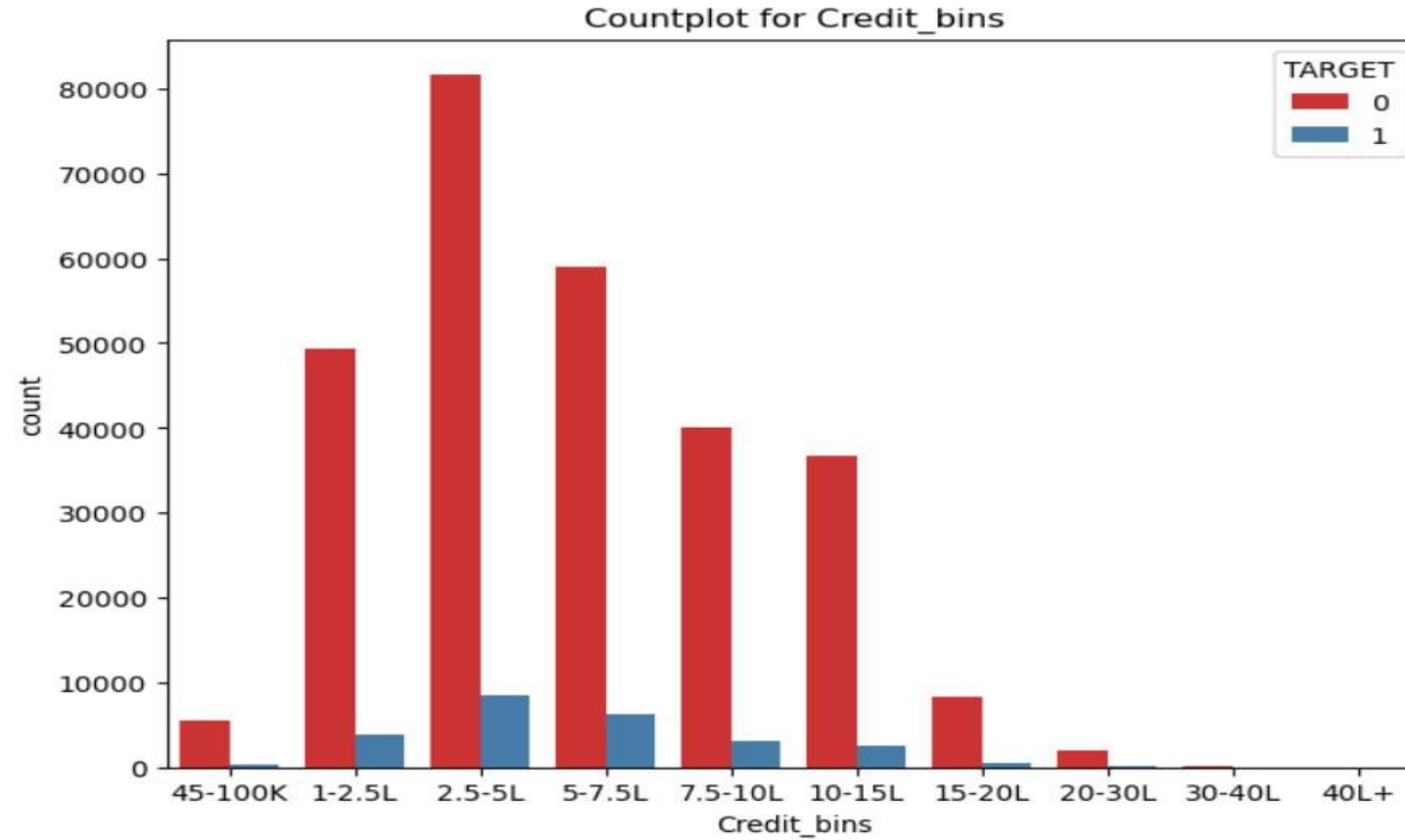
People aged 30-40 years are highest to apply for loans.

Univariate Analysis



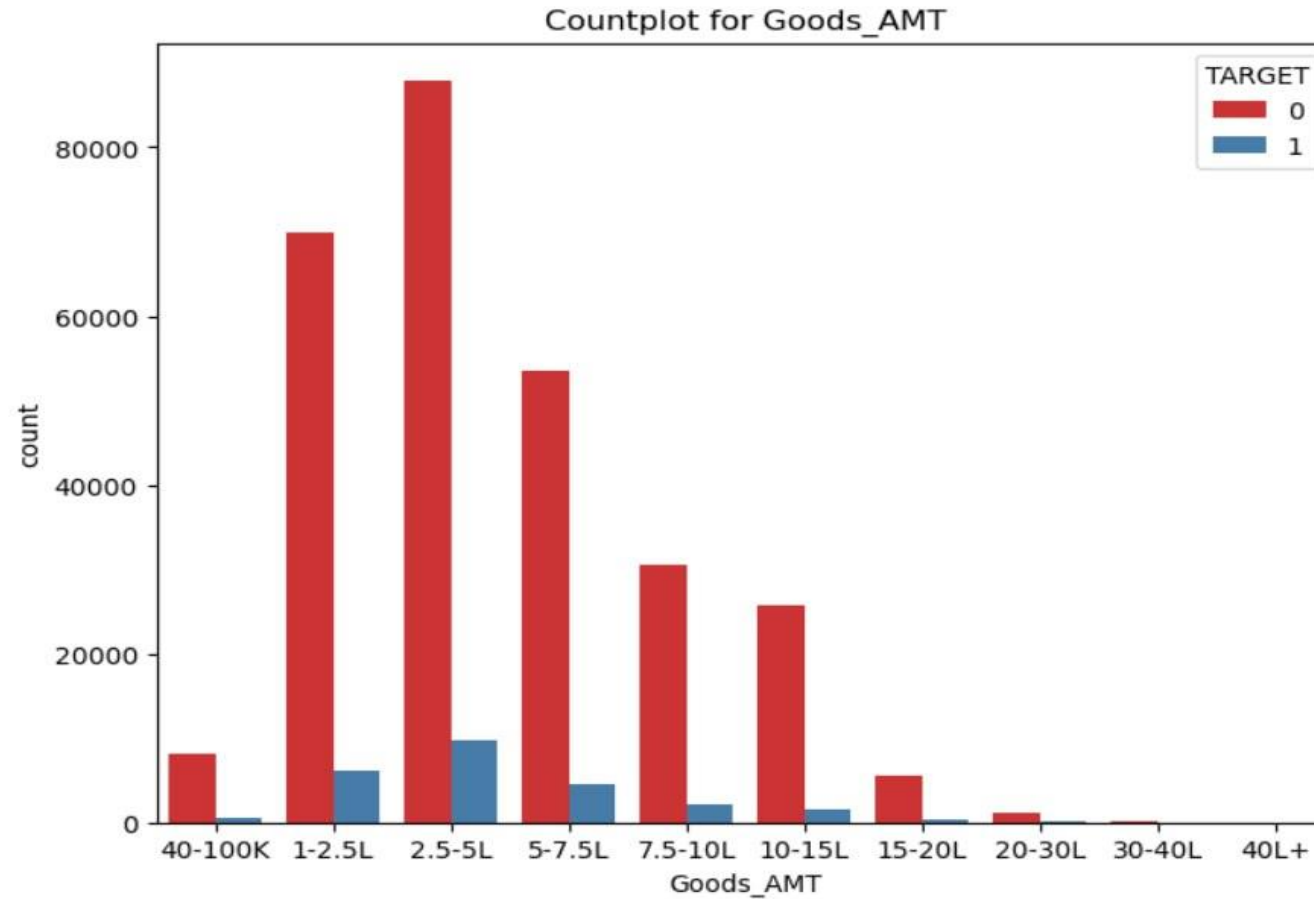
Employers with 5-10 years of employment are highest applicant for applying for loans followed by employers of 1-3 years of employment.

Univariate Analysis



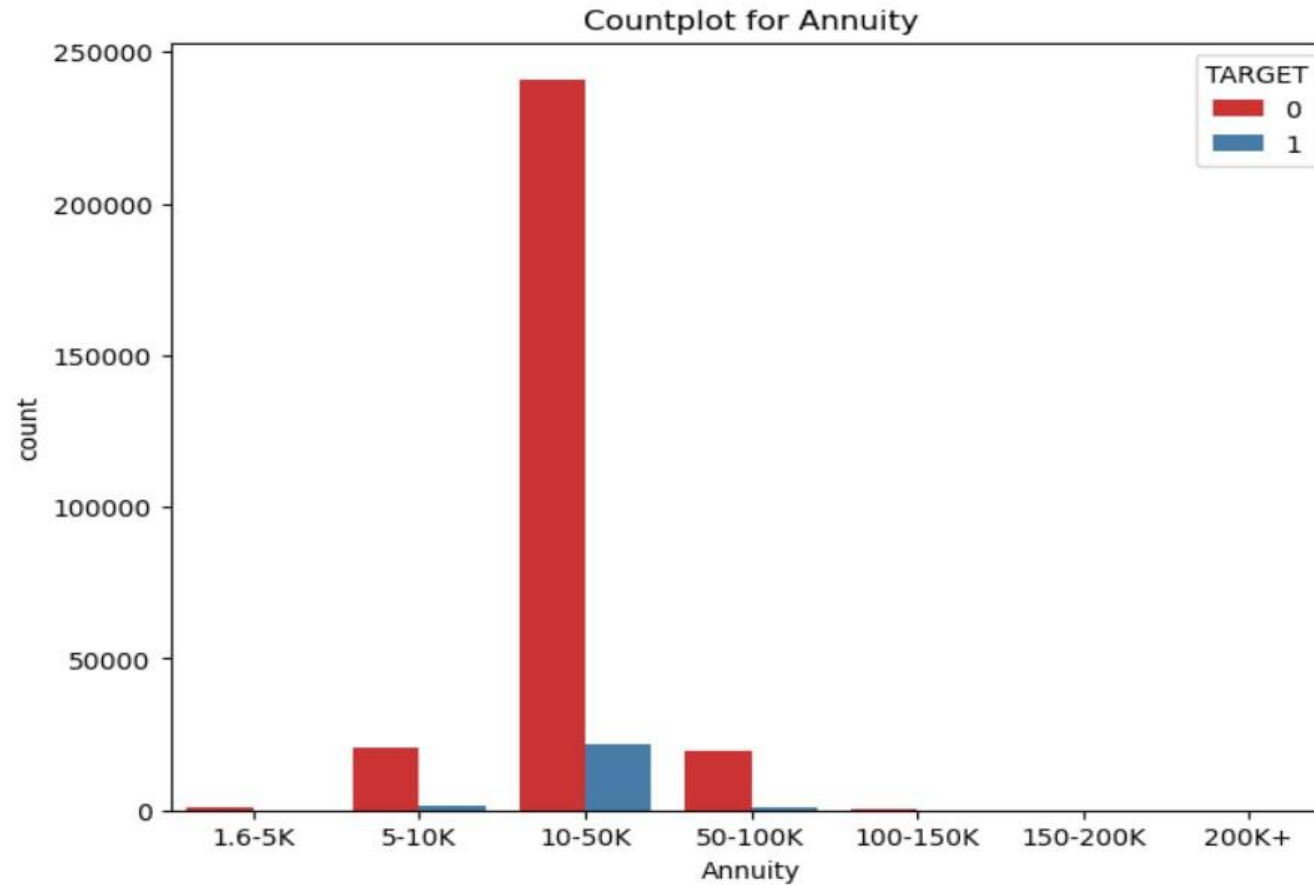
Most loans are given in range of 2.5-5lakhs stood first for credit applicants.

Univariate Analysis



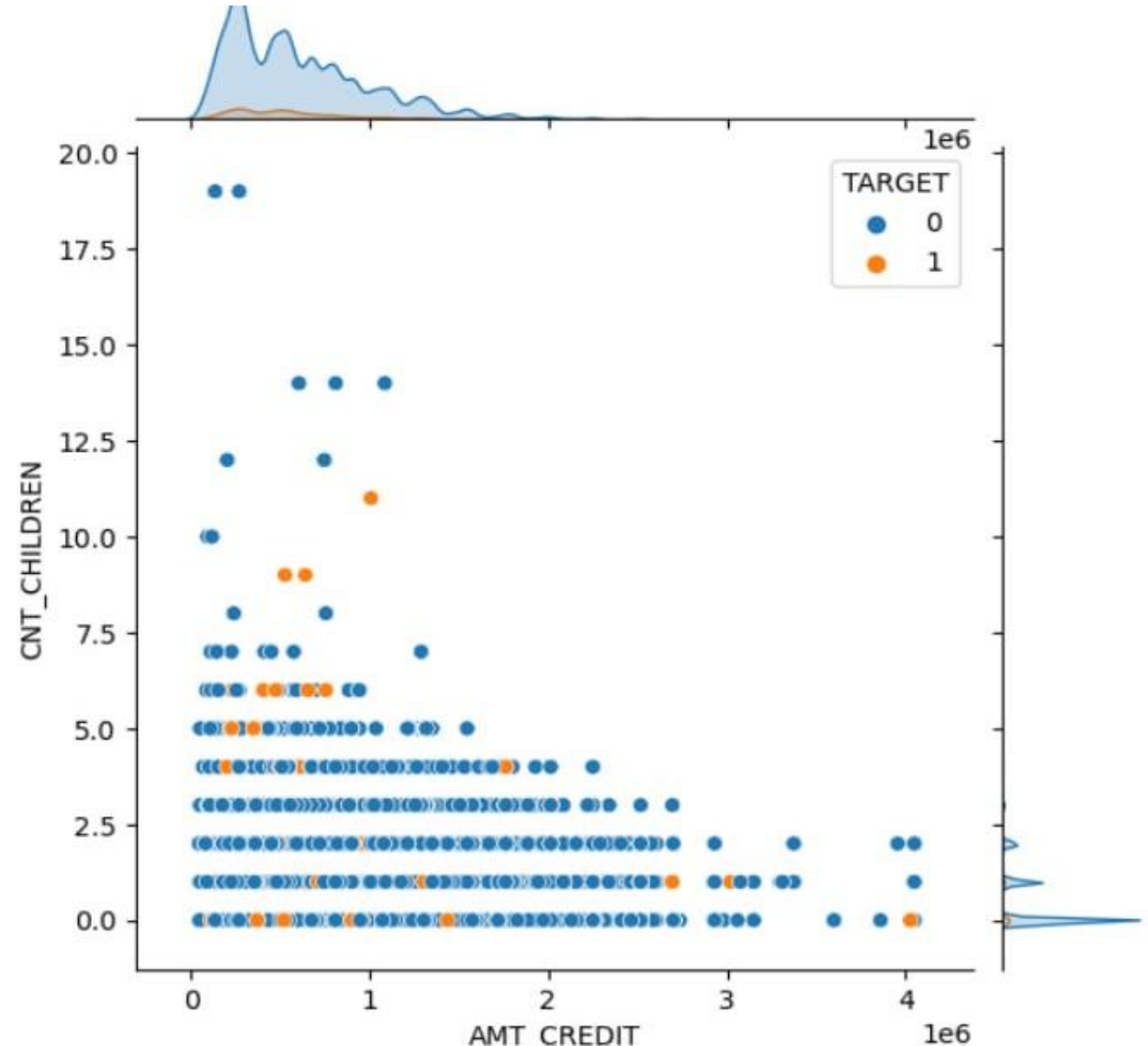
Goods prized between 2.5-5lakhs stood first for credit applications.

Univariate Analysis



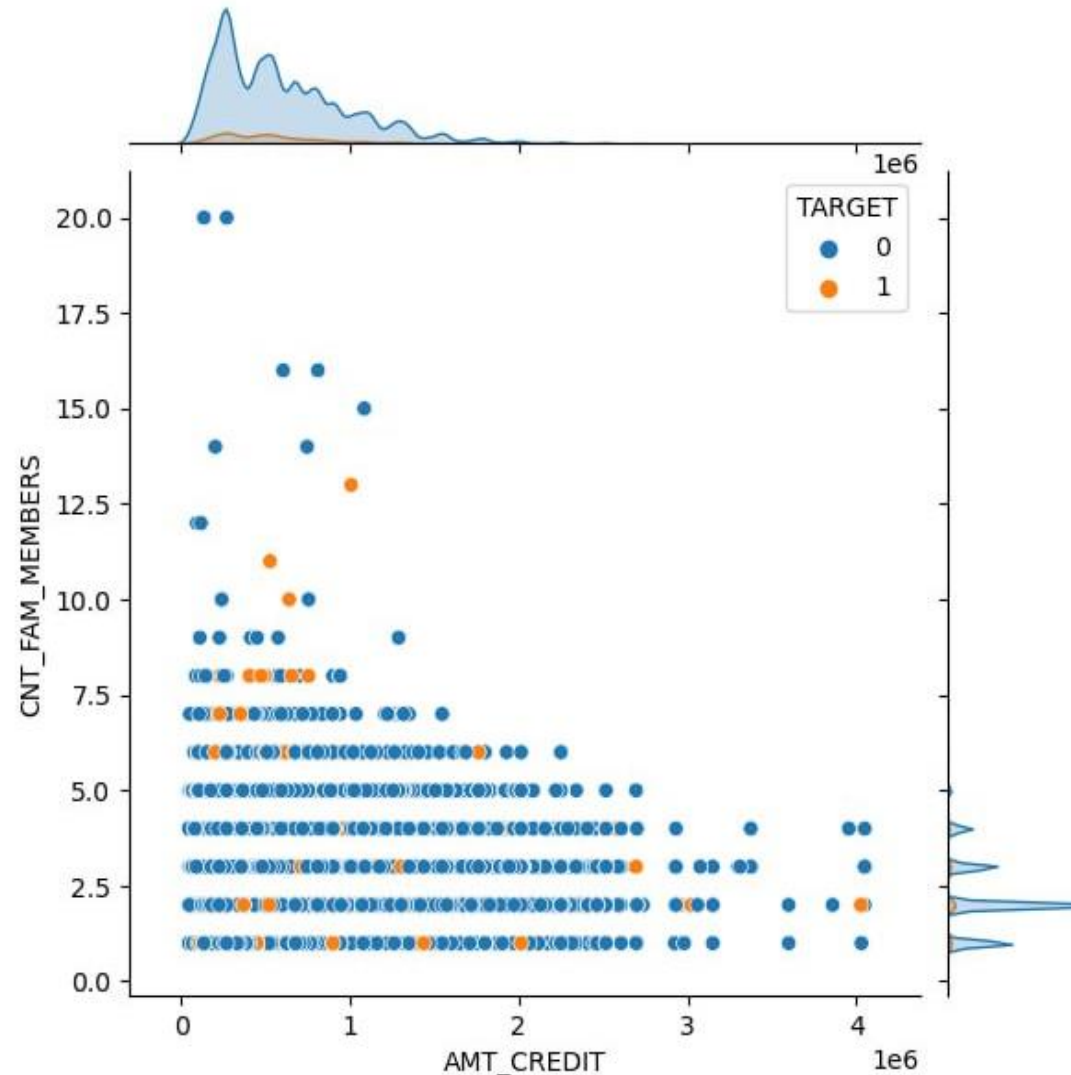
Most annuity is paid for price range of 10-50 thousands.

- People who have no children and loan amount is upto 15 lakhs are more defaulters.
- People with no children and loan amount greater than 15 lakhs are less defaulters.
- People with more than 5 children's are more defaulters.
- People between 1-4 children's are less likely to default.



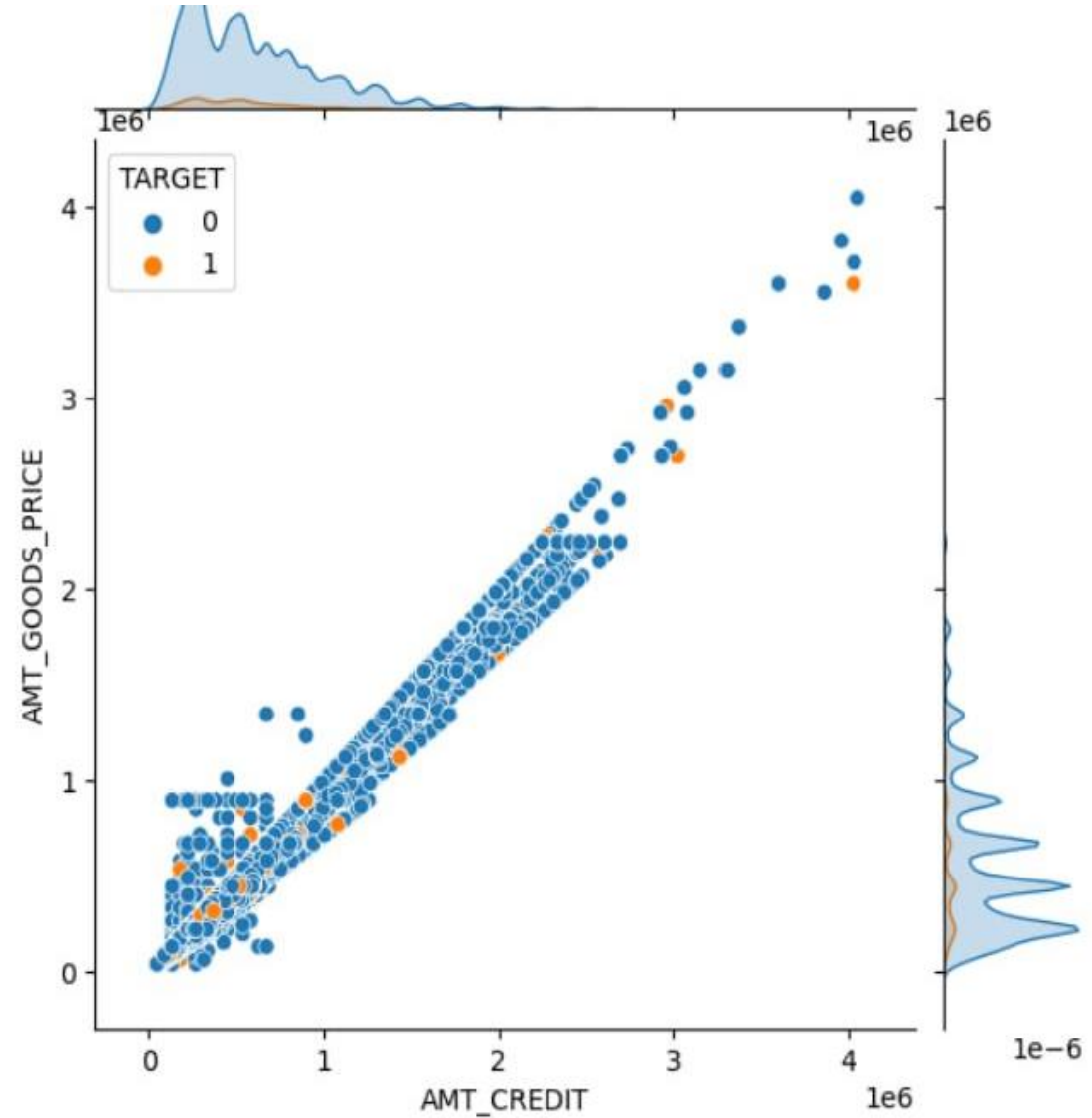
Bivariate Analysis

- Client with more than 7 family members are most likely to default for credit upto 10 lakhs.
- Client with family members 4-5 are least likely to default in all loan ranges.
- Client with 2 family members are most likely to default for credit of upto 10 lakhs.



Bivariate Analysis

- Amount goods price and amount credit is linearly correlated.
- Most defaulters are in the segment of less than 1 million credit amount.
- Amount credit increases, defaulters are decreasing.



Inferences-

1. The factors deriving defaulters for example Laborer's are more likely to default as compared to Managers, who receives higher and fixed source of income.
2. Company should target families with 1-4 children and should avoid giving loans with above 5 children as they are more likely to default. Probable reason for this behavior is high responsibility and more dependents.
3. Client with no children are more likely to default so rate of interest can be made higher probably due to due to certain characteristics or irresponsible financial behaviors.
4. Middle-high income group can be targeted more as they need more loans compared to other category so that they could invest.
5. People aged 30-40 years are highest to apply for loans and hence can be targeted more because they have the capacity and working age to repay the loan.