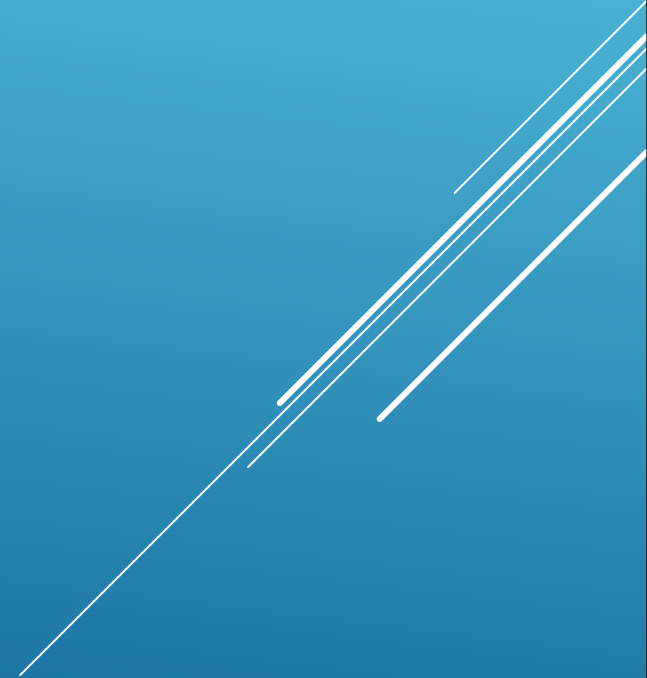


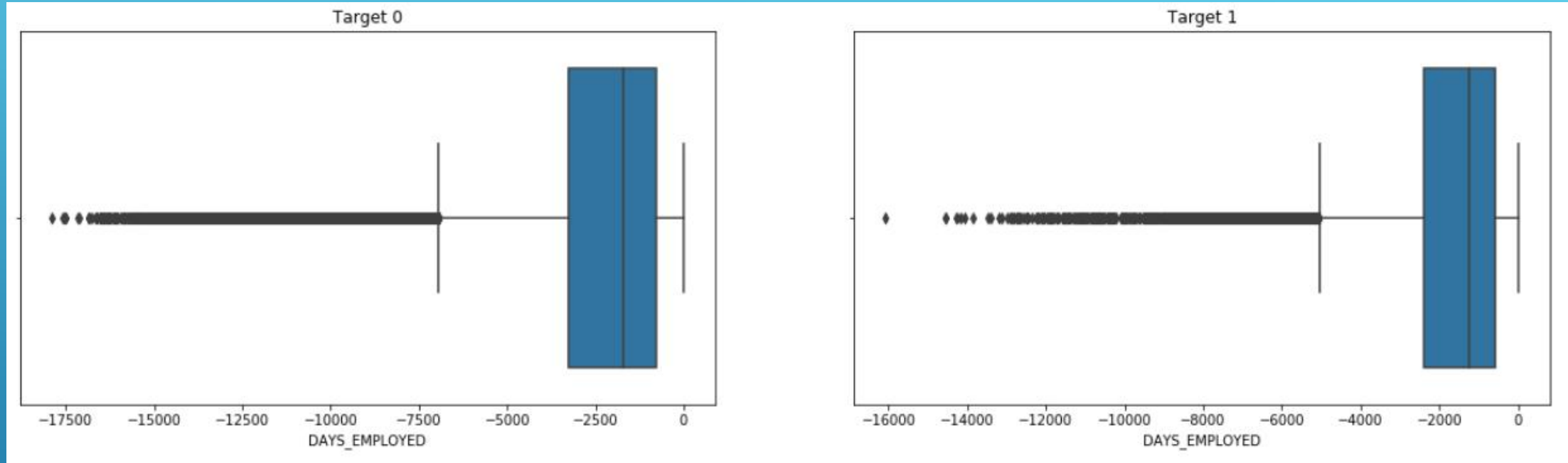
# **CREDIT EDA CASE STUDY**

**By Ramya Sree Narwa, Pranavi Kothur**

# UNIVARIATE ANALYSIS

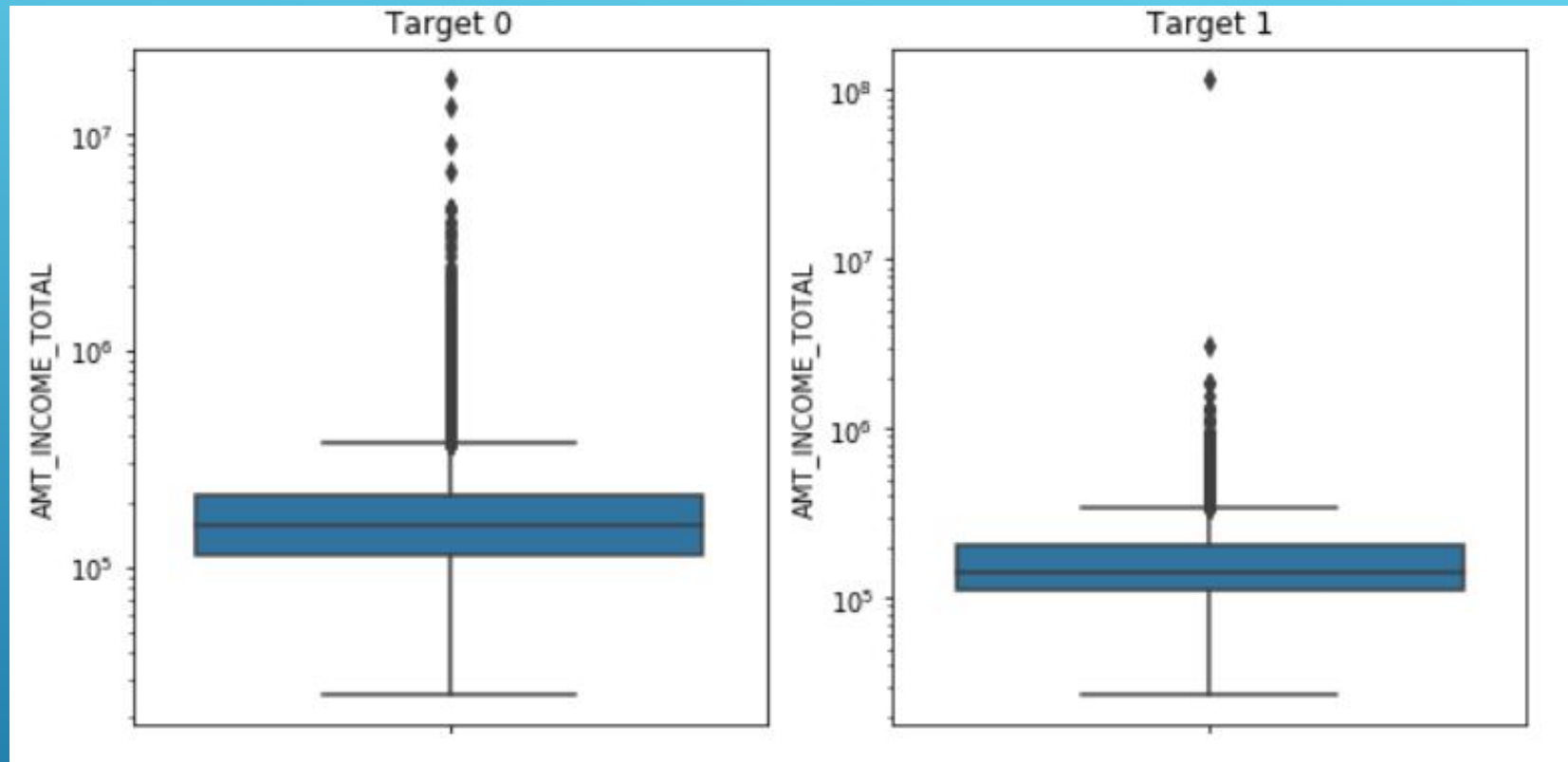


# Distribution for Days Employed



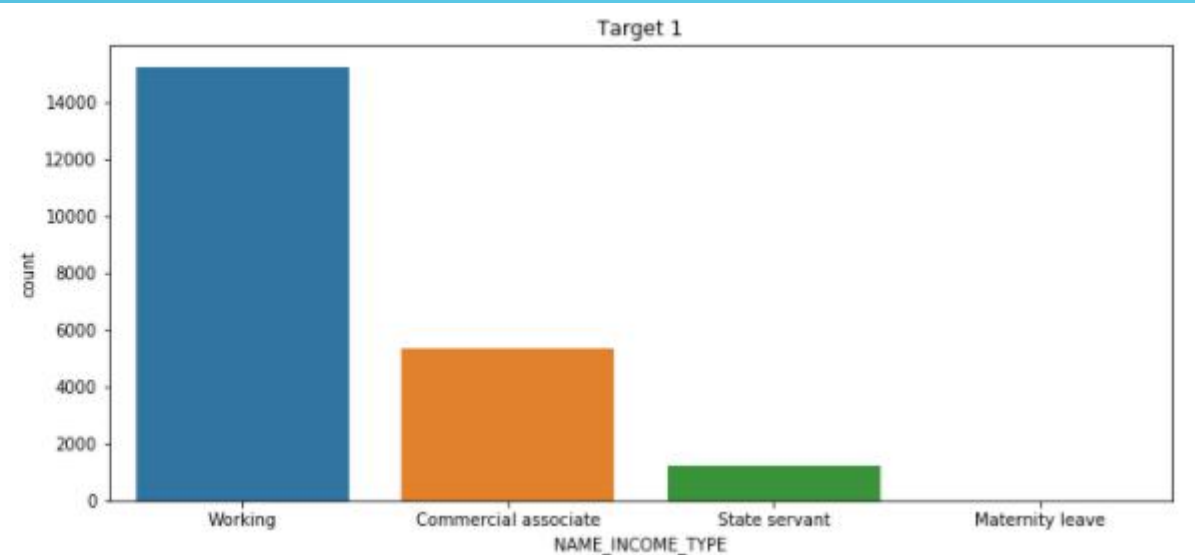
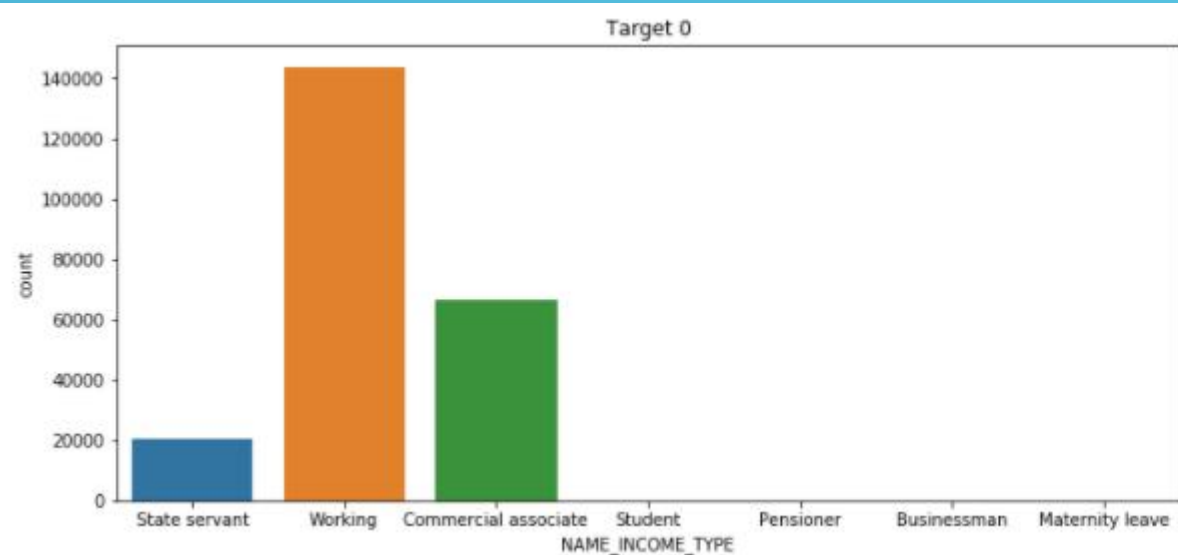
The clients with payment difficulties are employed for lesser number of days than the other clients.

# Distribution of Total Income

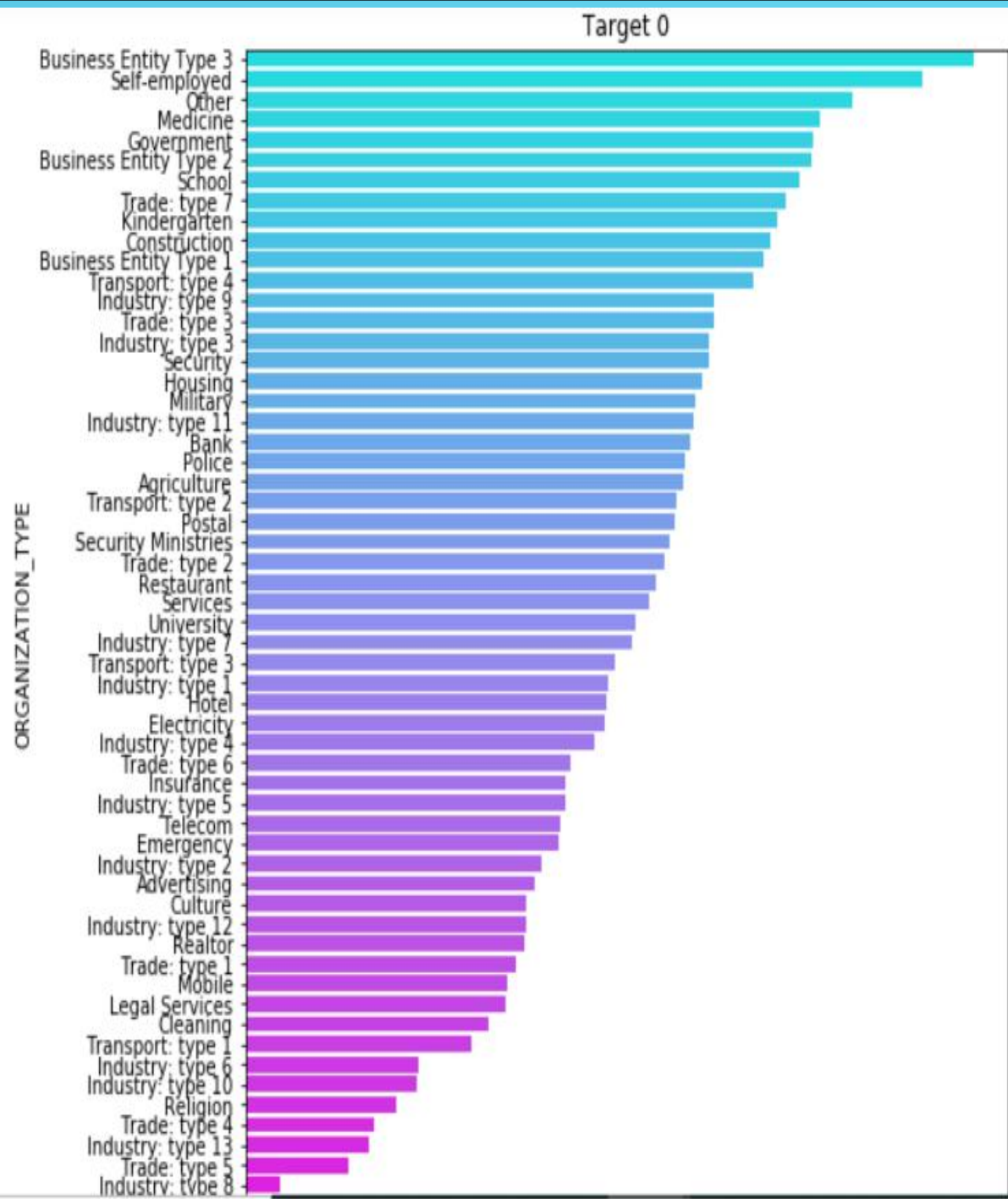


The clients with higher income have less payment difficulties.

# Distribution of Income Type



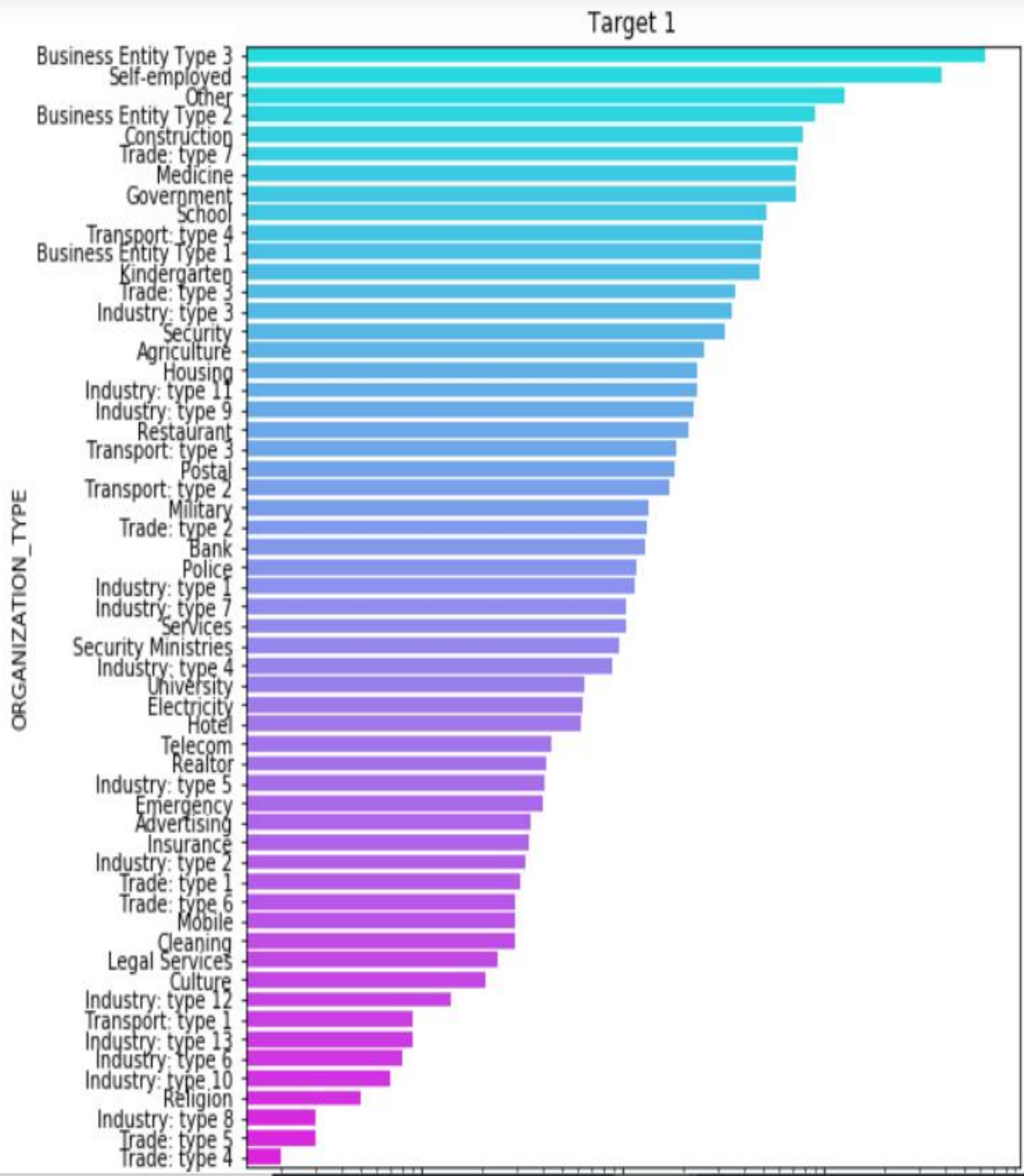
1. The income types Student, Pensioner, Businessman have no payment difficulties
2. The working clients who have payment difficulties are higher than that of others



# Distribution of Organization Type-Target 0

1. Clients which have applied for credits are from most of the organization type 'Business entity Type 3' , 'Self employed' , 'Other' , 'Medicine' , 'Government' and 'Business Entity Type 2'.

2. Less clients are from Industry type 8, Trade : type 5, Industry : type 13, Trade: type 4 and Religion.



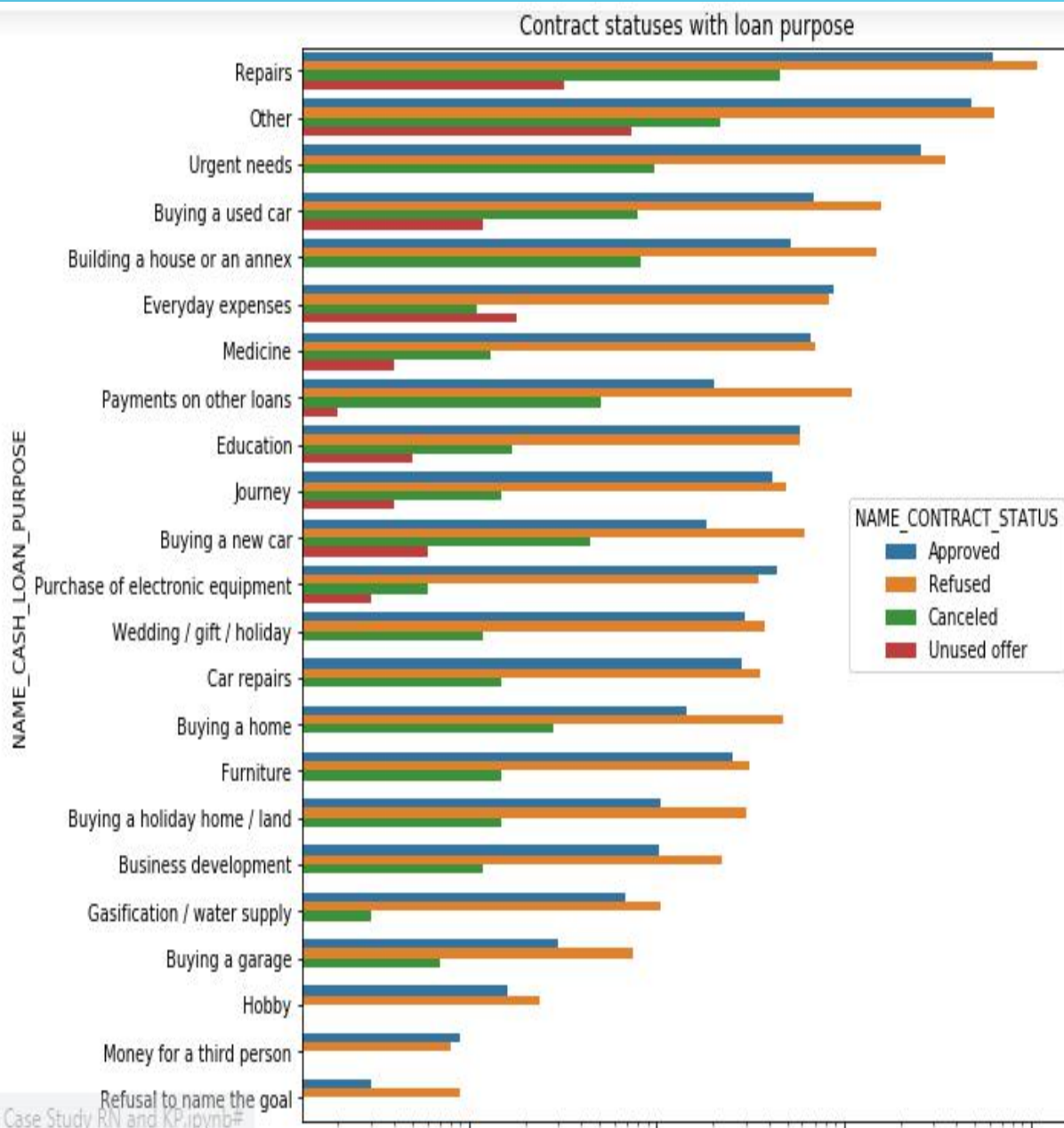
# Distribution of Organization Type-Target 1

1. Clients which have applied for credits are from most of the organization type 'Business entity Type 3' , 'Self employed' , 'Other' , 'Business Entity Type 2' and 'Construction'.

2. Less clients are from Trade : type 4 , type 5, Industry: type 8 , Religion and Industry: type 10.



# Loan Purpose Vs Contract Status



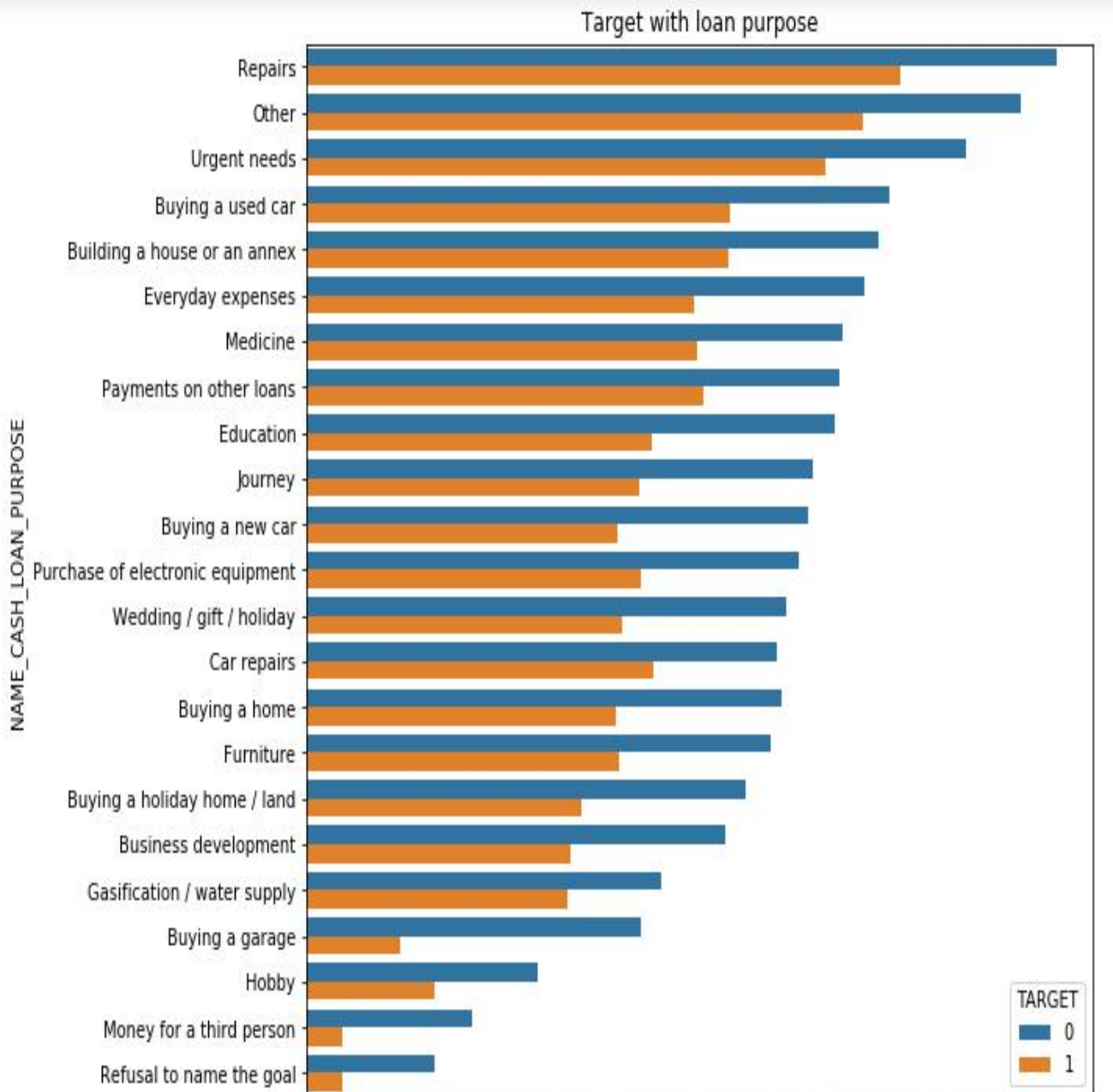
1. The approval rate for 'Everyday expenses' , 'Money for third person' and 'purchase of electronic equipment' is higher than the rejection rate while for all others rejection rate seems to be higher.

2. The approval and rejection rate for loan purpose 'Education' are similar.

3. The loan purposes 'Hobby', 'Money for a third person' and 'Refusal to name goal' doesn't have any cancelled loans.



# Loan Purpose Vs Target

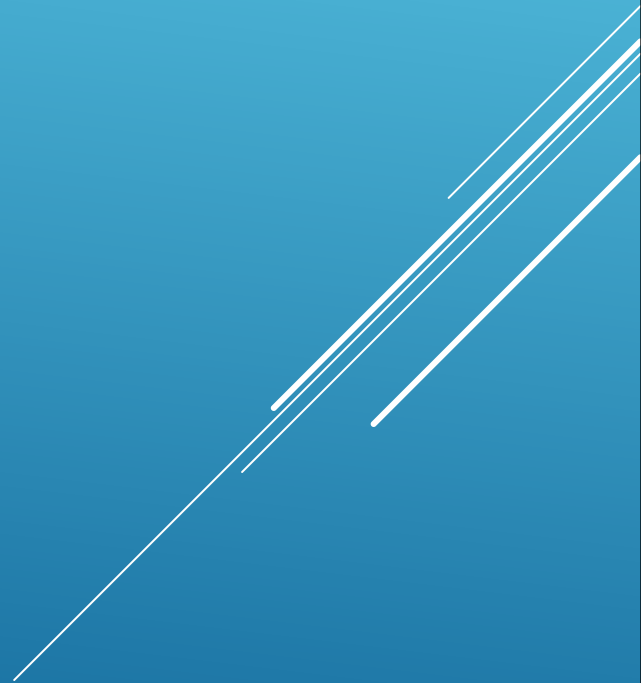


1. The cash loan purposes belonging to target 0 are more than that of target 1.

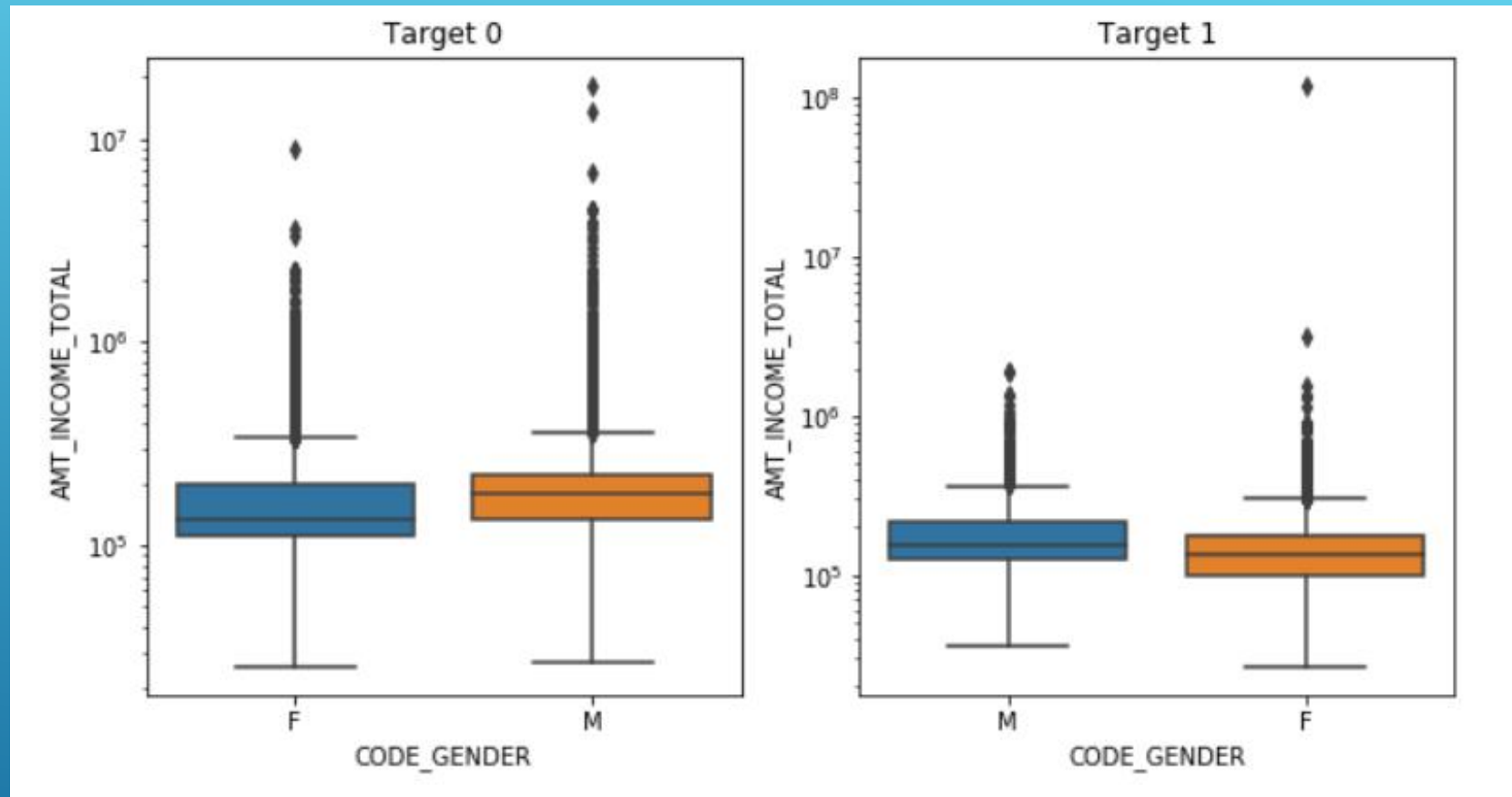
2. Loan purpose 'Repairs' has more no.of clients with payment difficulties.

3. 'Buying a garage' , 'Money for third person' and 'Refusal to name the goal' have higher loan payments than the difficulties in payment.

# Bivariate Analysis

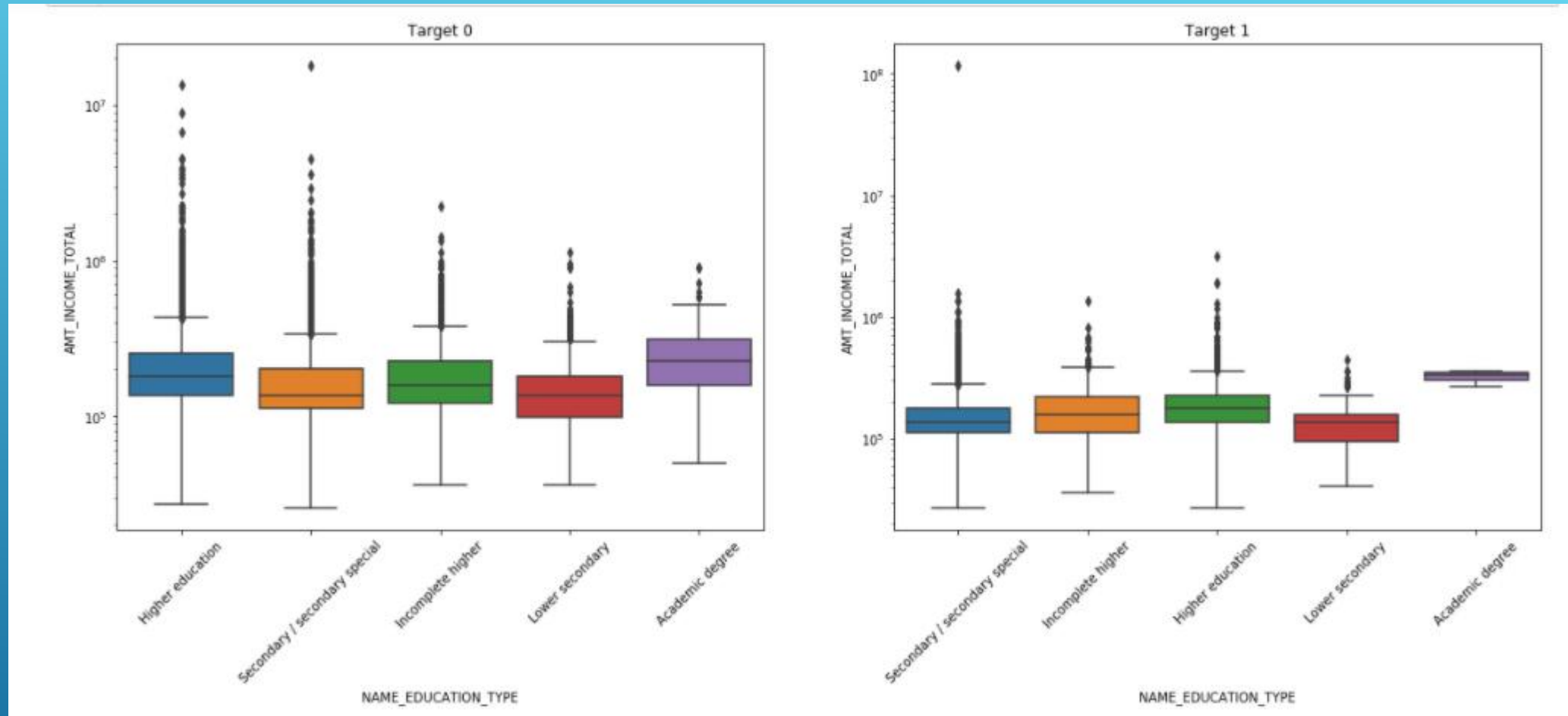


# Gender Vs Total Income



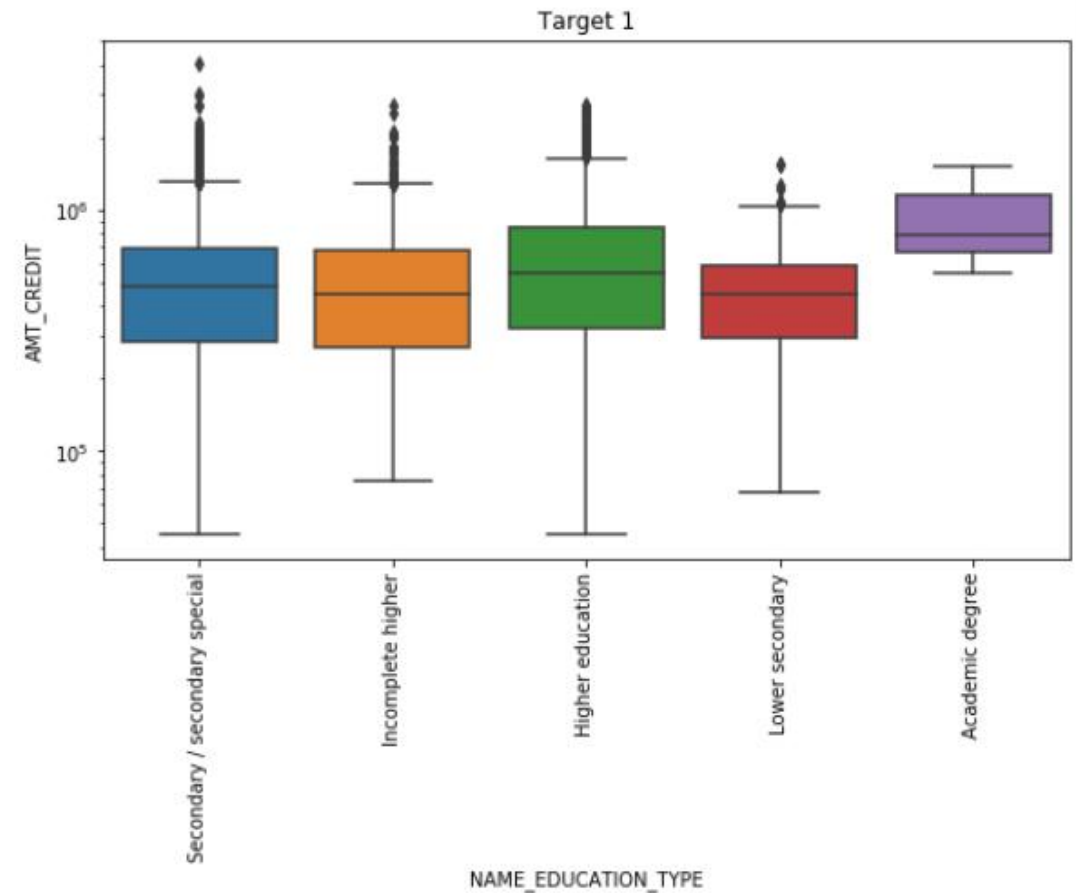
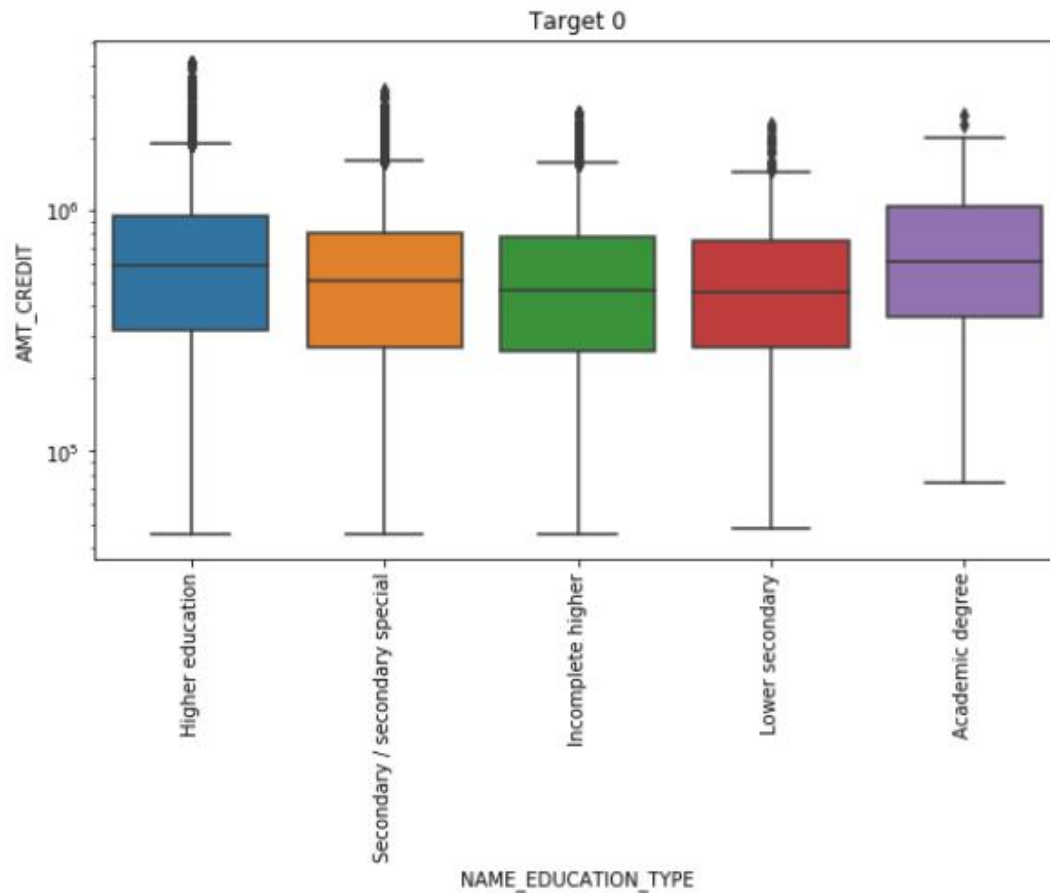
For both the Target 0 and Target 1 clients, males have higher median value for Income than that of the females.

# Education Type Vs Total Income



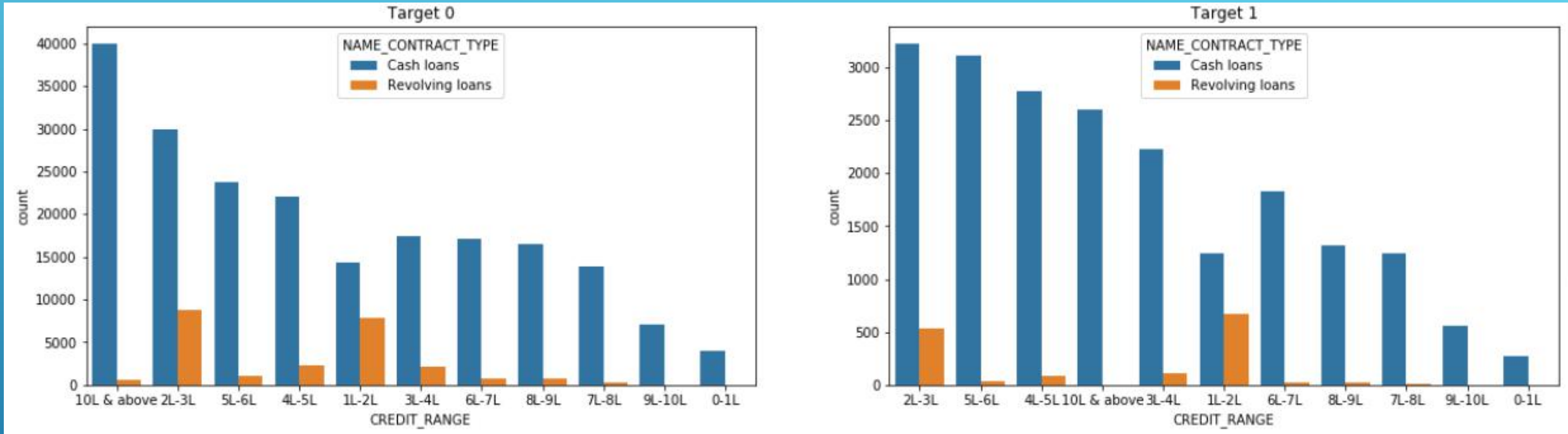
1. There are very few clients with academic degree and payment difficulties.
2. Clients with higher education has high income total and are in Target 0.

# Credit Vs Education Type



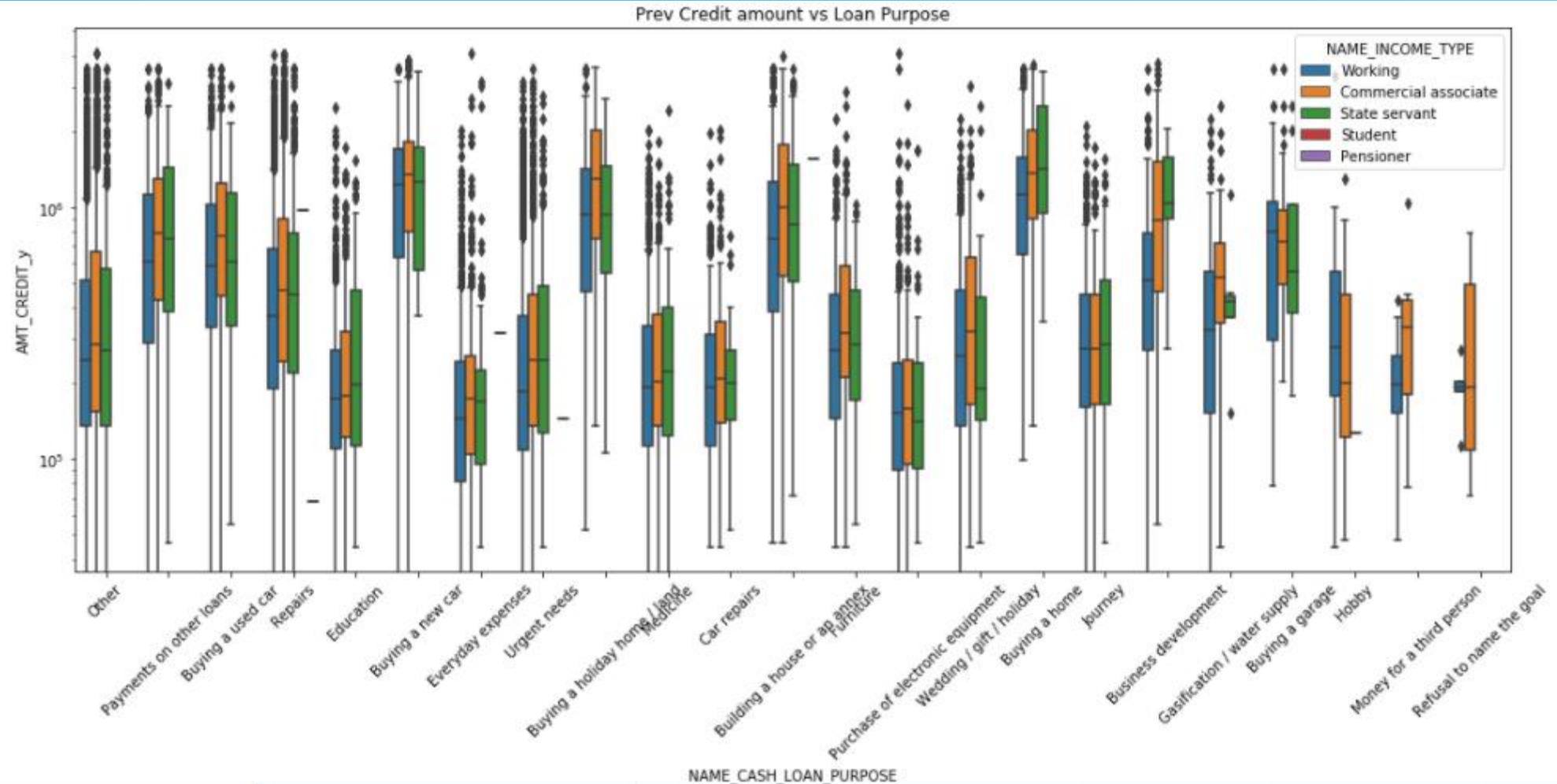
For the education type Academic degree, credit amount is high and also have higher payment difficulties.

# Contract Type Vs Credit Range



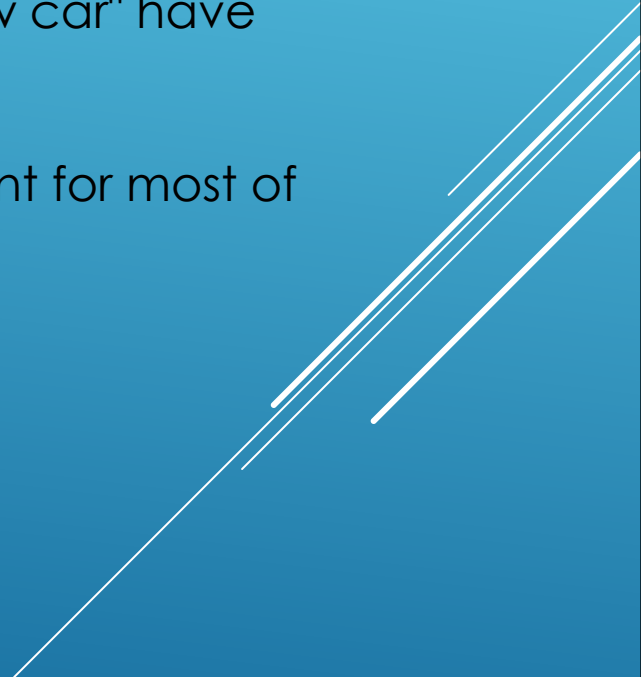
1. The cash loans are more for both Target 0 and Target 1 clients.
2. Target 0 clients with credit range 10L and above have more cash loans while Target 1 with credit range of 2L-3L.
3. Both Contract type have the least credit range of 0-1L.

# Previous Credit Vs Loan purpose

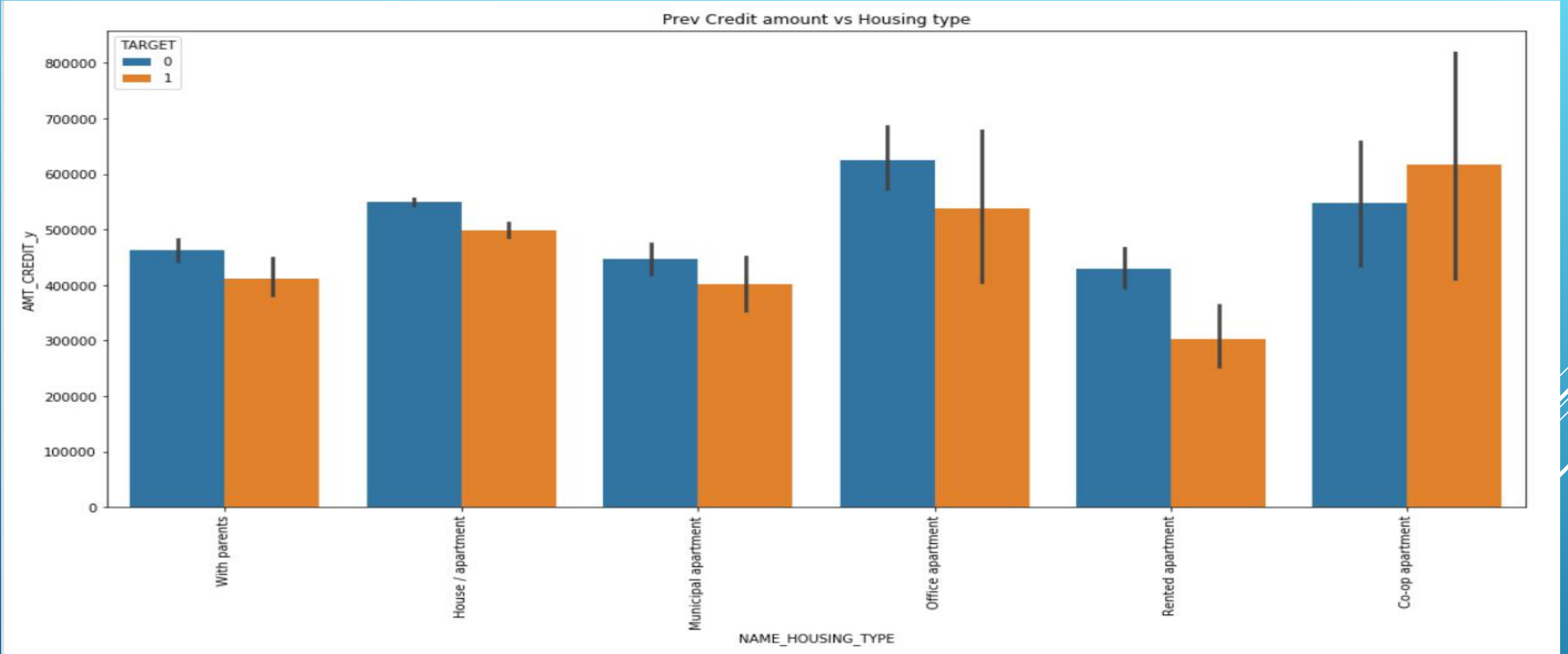




# Previous Credit Vs Loan purpose

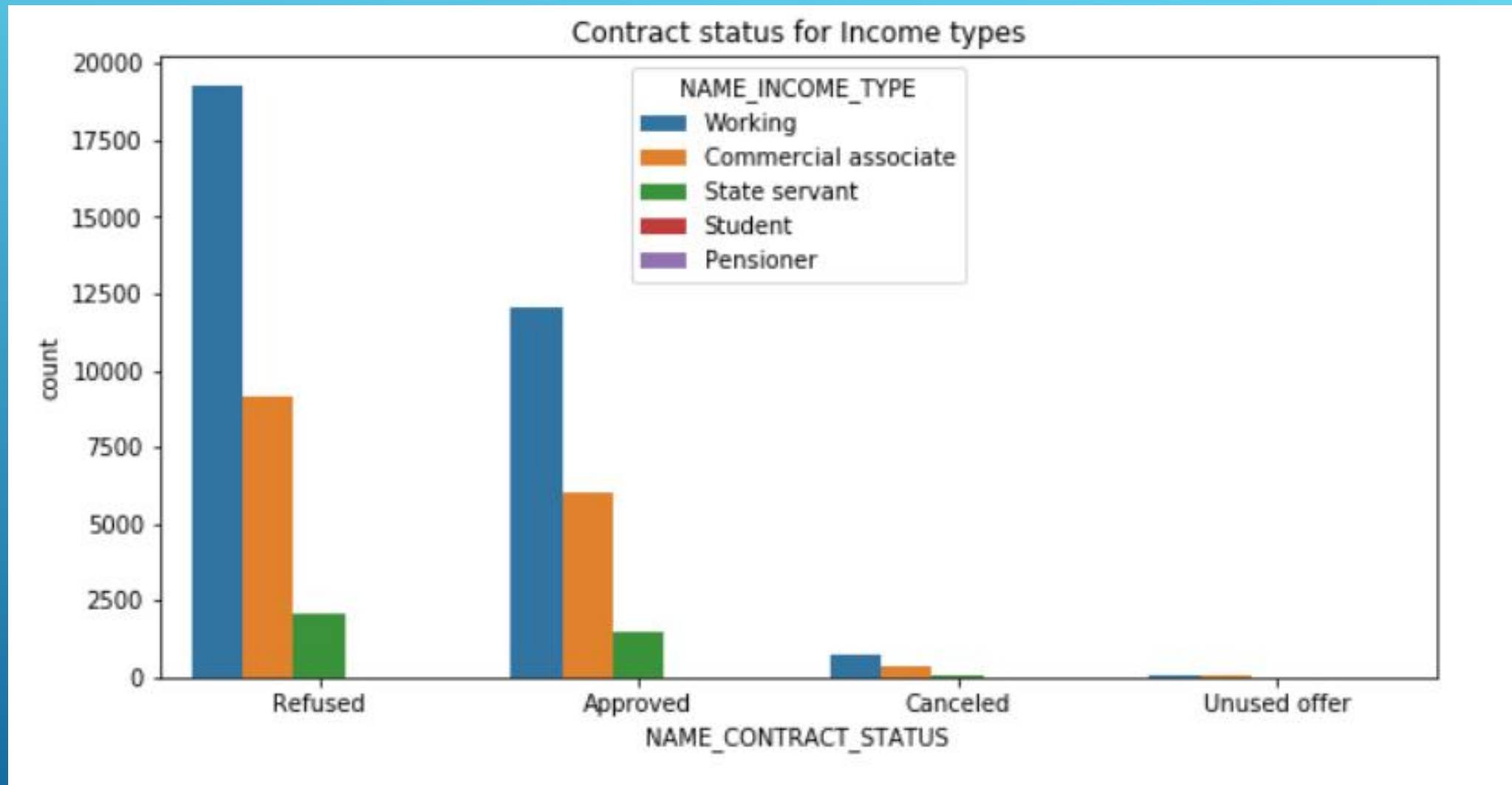
1. State servant income type have not taken any loans for the purpose of Hobby and Money for third person.
  2. Student and pensioners income types doesn't have any significant previous credit amount for any purpose.
  3. For the purposes "Buying a home", "Buying a land" and "Buying a new car" have higher credit amount.
  4. Commercial associates and state servants have higher credit amount for most of the loan purposes.
- 

# Previous Credit Vs Housing Type



1. Clients with housing type 'Office apartment' have higher credit and pay loans without difficulties.
2. Clients with 'Co-op apartment' have higher credit and more payment difficulties than other housing types.

# Contract status for Income Types



1. Very few unused the offer from all the income types.
2. The approval rate and refusal rate are both higher for income type of "Working".

# Conclusion

- 1.Loans can be approved to any other housing type except "co-op apartment".
- 2.Bank should concentrate on the income types "student" and "pensioner" and avoid "working" as they have more payment difficulties.
- 3.Loans can be approved to clients with housing type "Office apartment" as they have maximum successful payments.
- 4.Bank needs to avoid clients with loan purpose of "Repairs" as they have more difficulties in payment.
- 5.Bank can approve the loans for clients with education type as "Higher education" as they seem to have higher income and lower payment difficulties.

Thank You

