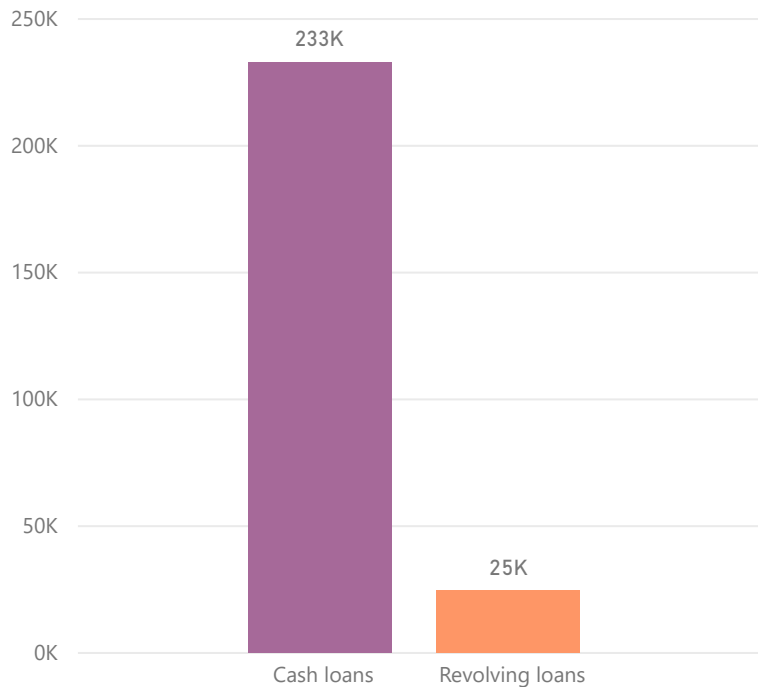
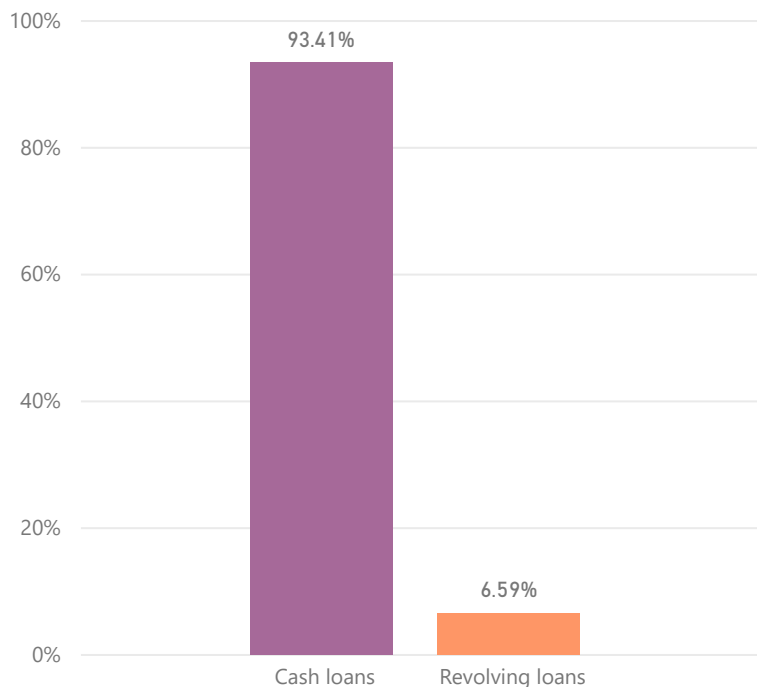


# Comparison of Loan Type

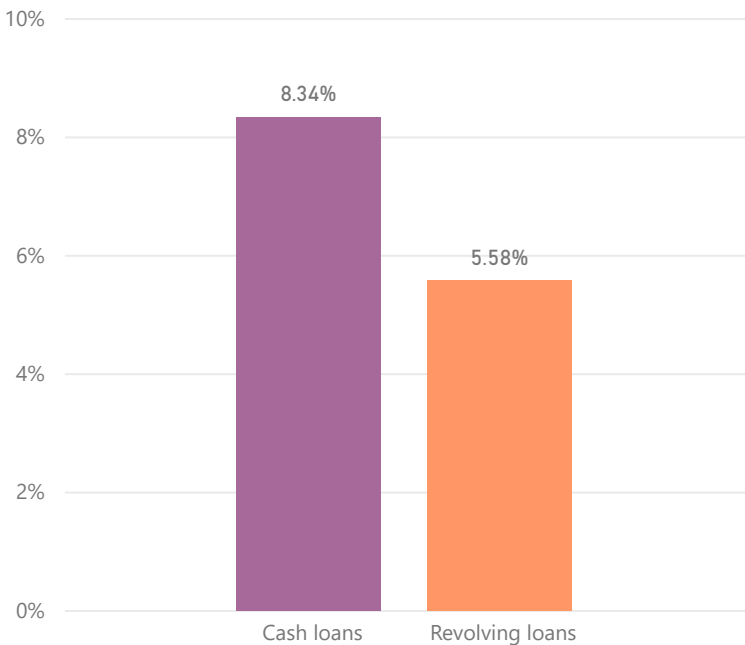
Count of Contracts by Contract Type



% of Loan not repaid (target=1) by Contract Type



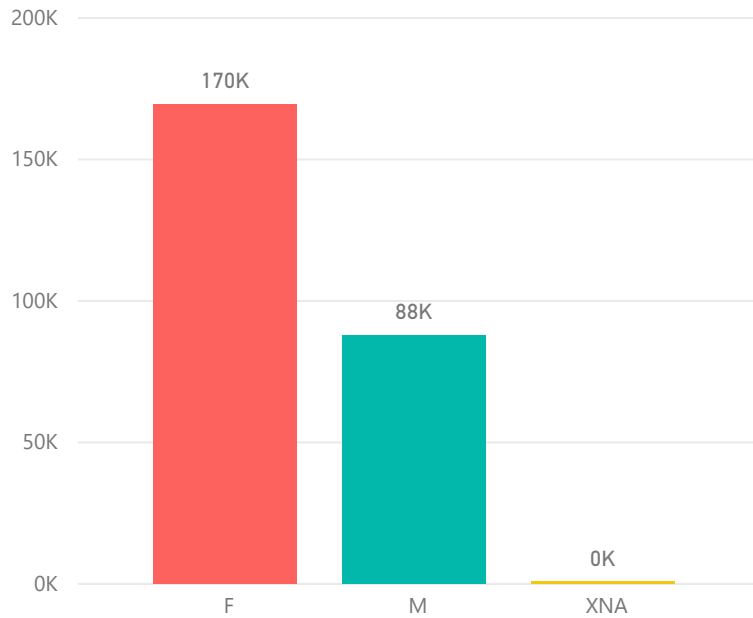
% of Loan not repaid (target=1) overall frequency by Contract Type



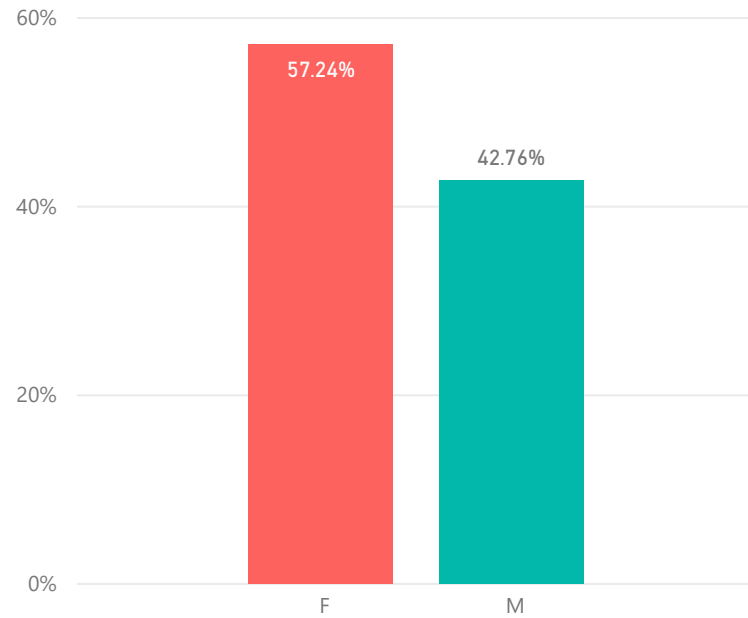
Contract type *Revolving loans* are just a small fraction (10%) from the total number of loans; The % of loan not repaid i.e Target=1 is only 6.59% for *Revolving loans* for all loans not repaid, but if you see in the same time, a larger amount of *Revolving loans* are not repaid *when* comparing with their frequency to the overall count.

# Comparison of Gender

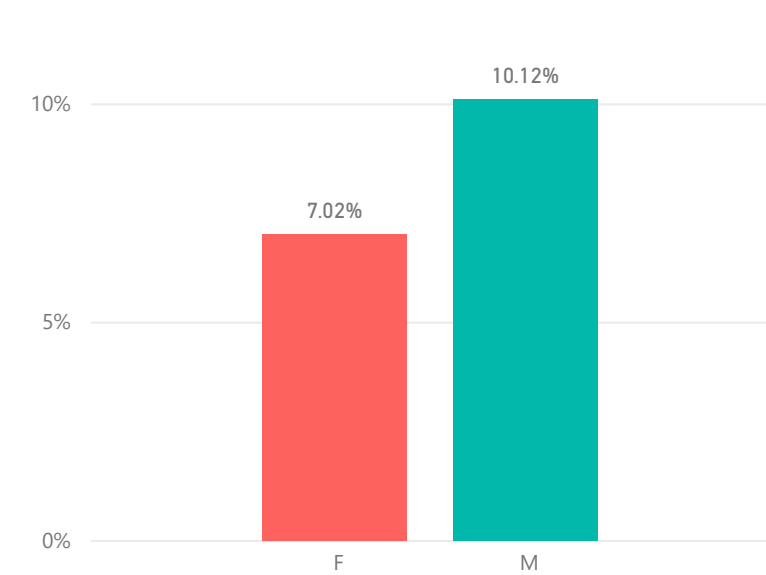
Count of Loans by Gender



% of Loan not repaid (target=1) by Contract Type



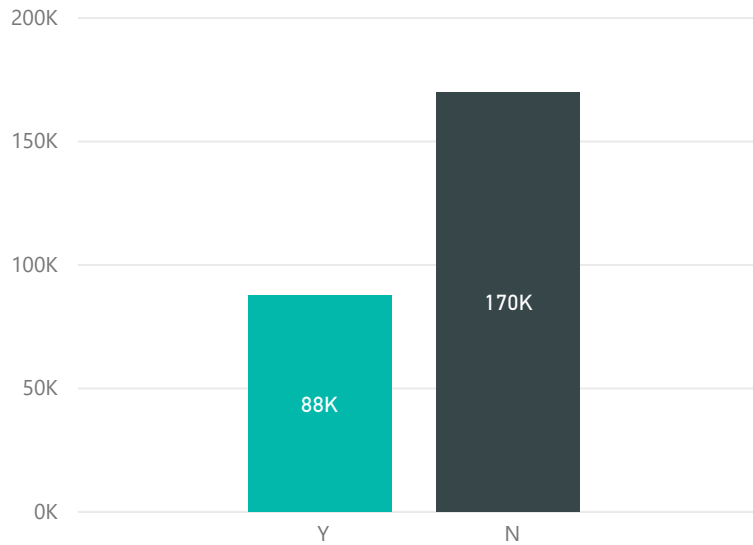
% of Loan not repaid (target=1) overall frequency by Contract Type



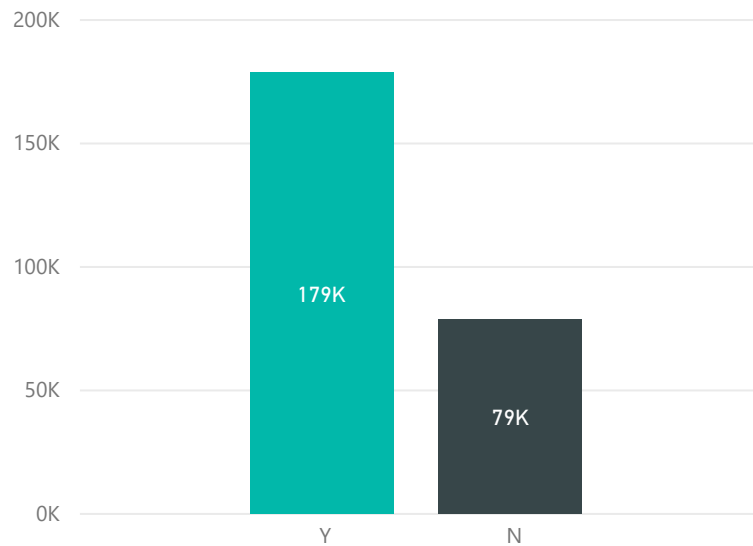
The number of female clients is almost double the number of male clients. In terms of clients not repaying loans though the male clients are less in number they have almost equal chance of not returning loans. Looking to the percent of defaulted credits, males have a higher chance of not returning their loans (~10%), comparing with women (~7%).

# Own Car and Real Estate

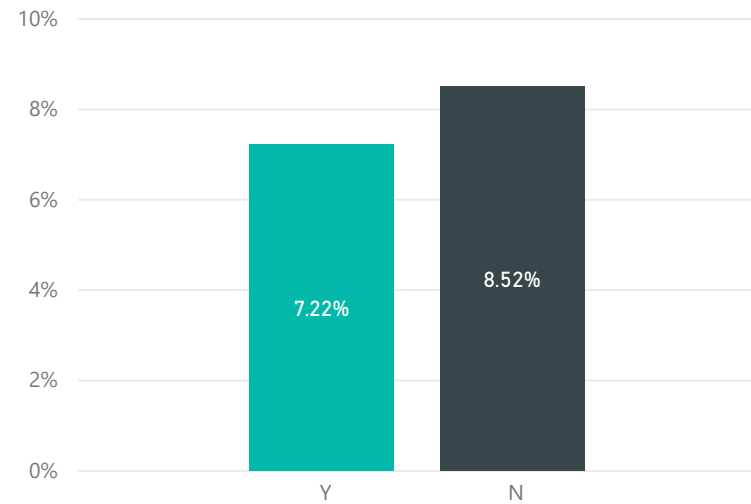
Count of Loans by Own Car



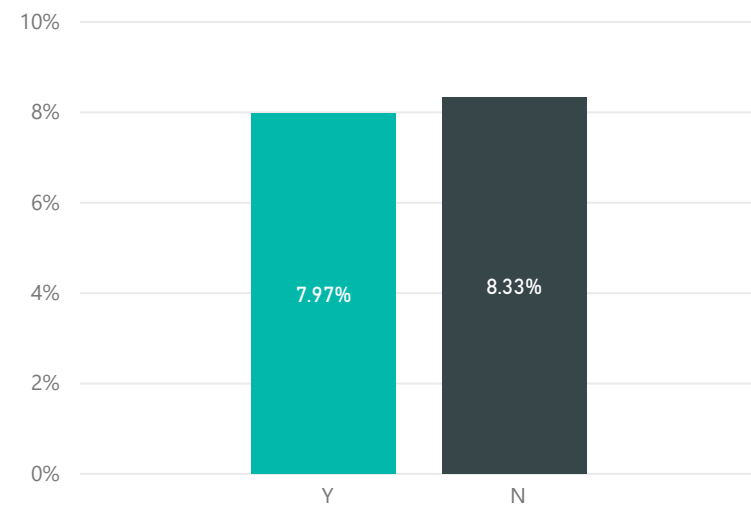
Count of Loans by Own Real Estate



% of Loan not repaid (target=1) overall frequency by Own Car



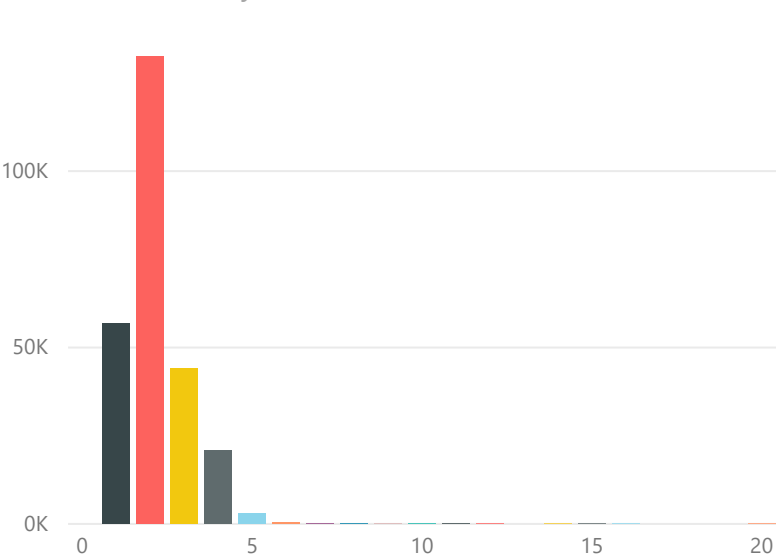
% of Loan not repaid (target=1) overall frequency by Own Real Estate



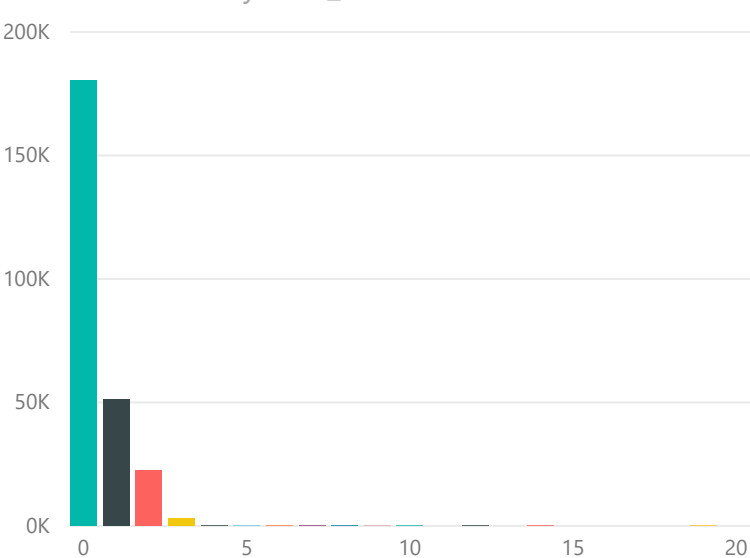
The clients that owns a car are almost a half of the ones that doesn't own one. The clients that owns a car are less likely to not repay a car that the ones that own. Both categories have not-repayment rates around 8%. The clients that owns real estate are more than double of the ones that doesn't own. Both categories (owning real estate or not owning) have not-repayment rates less than 8%.

# Number of Family members and children

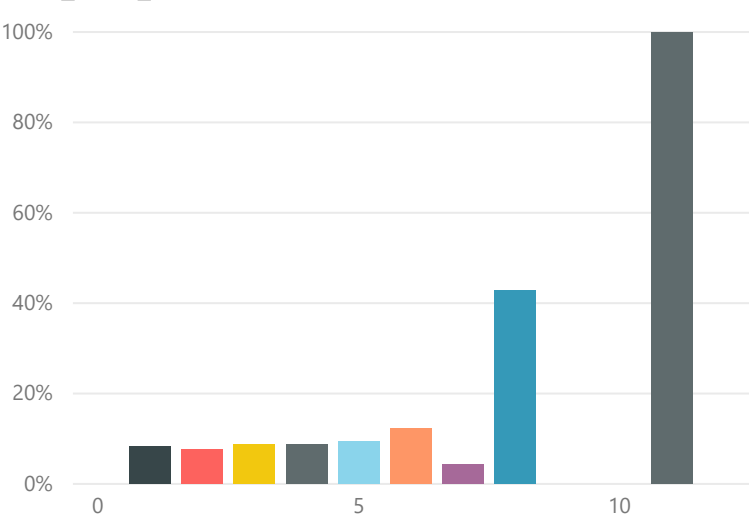
Count of Loans by CNT\_FAM\_MEMBERS



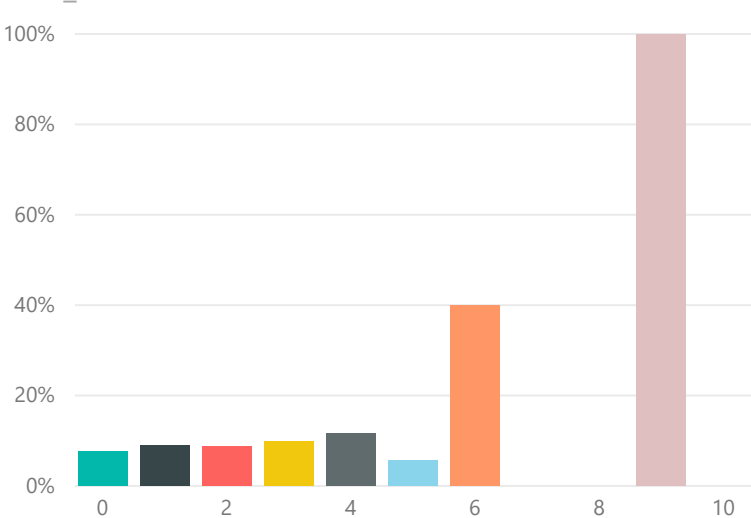
Count of Loans by CNT\_CHILDREN



% of Loan not repaid (target=1) overall frequency by CNT\_FAM\_MEMBERS



% of Loan not repaid (target=1) overall frequency by CNT\_CHILDREN

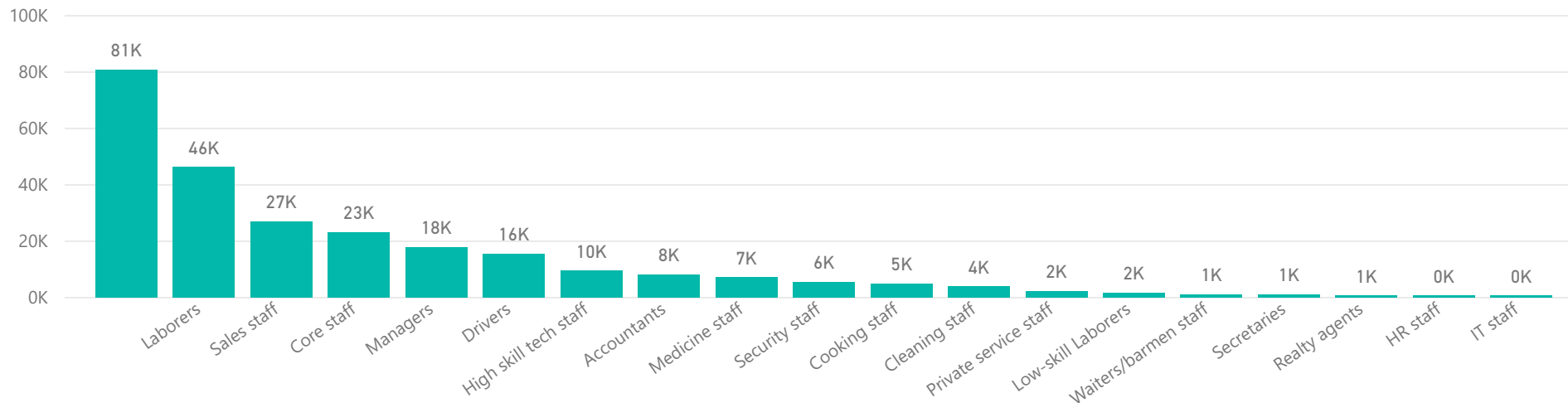


The clients with no children, 1, 2, 3, and 5 children have percents of no repayment around the average (10%). The clients with 4 and 6 children are above average in terms of percent of not paid back loans (over 25% for families with 6 children). Clients with family members of 2 are most numerous, followed by 1 (single persons), 3 (families with one child) and 4.

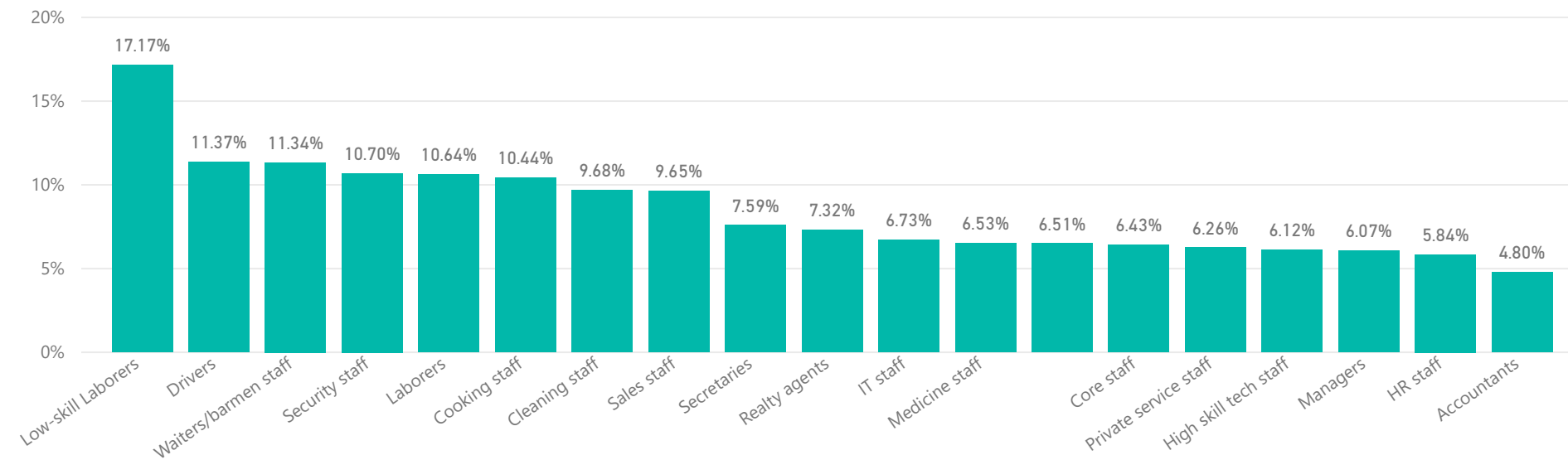
Clients with family size of 11 and 13 have 100% not repayment rate. Other families with 10 or 8 members have percents of not repayment of loans over 30%. Families with 6 or less members have repayment rates close to the 10% average.

# Comparison of Occupation Type

Count of Loans by Gender



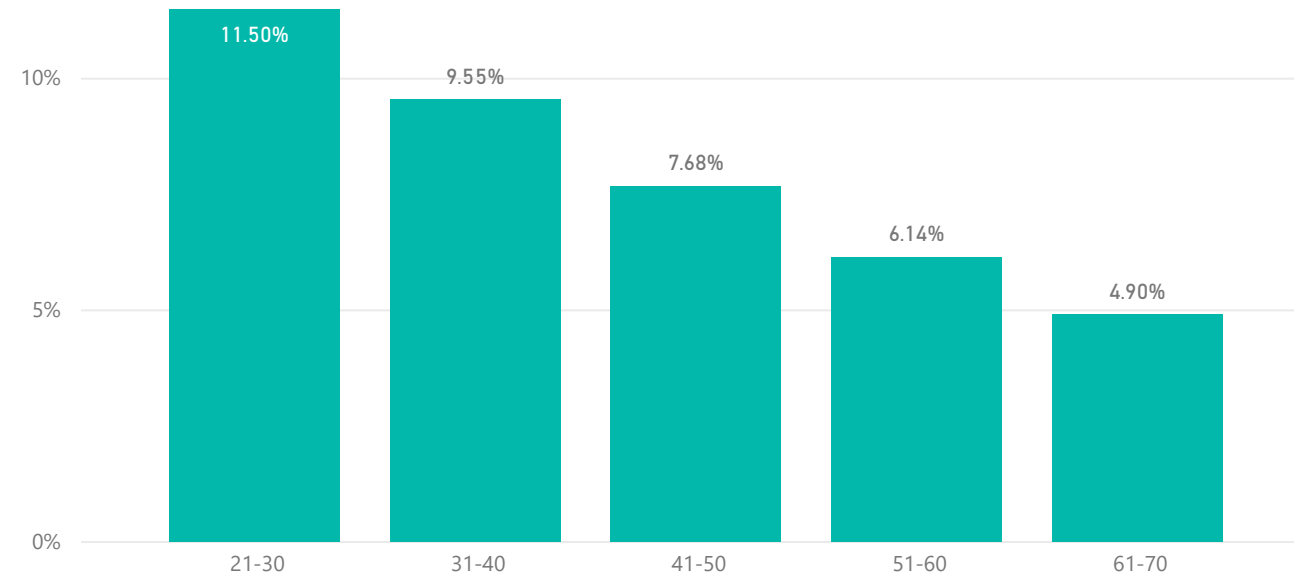
% of Loan not repaid (target=1) overall frequency by Contract Type



Most of the loans are taken by *Laborers*, followed by *Sales staff*. *IT staff* take the lowest amount of loans. The category with highest percent of not repaid loans are *Low-skill Laborers* (above 17%), followed by *Drivers* and *Waiters/barmen staff*, *Security staff*, *Laborers* and *Cooking staff*.

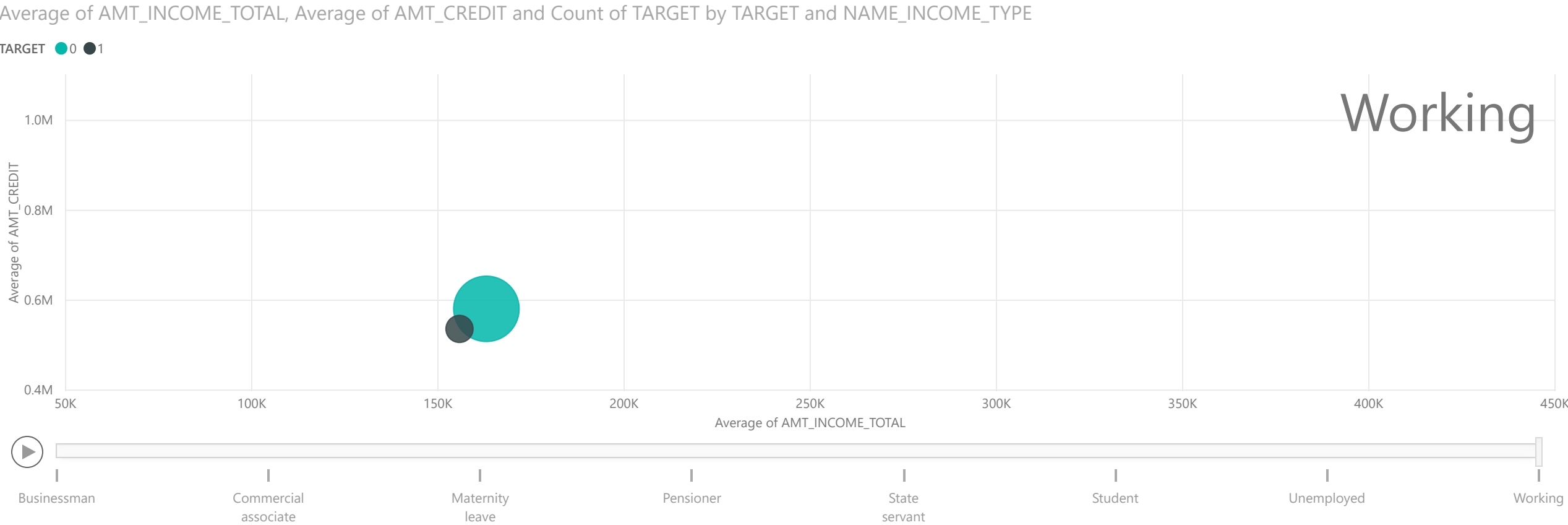
# Comparison of Age Groups with Target

% of Loan not repaid (target=1) by Age Group



Clients whose ages are between 21-30, the younger applicants are more likely to not repay the loan! The rate of failure to repay is above 10% for the youngest age groups and below 5% for the oldest age group.

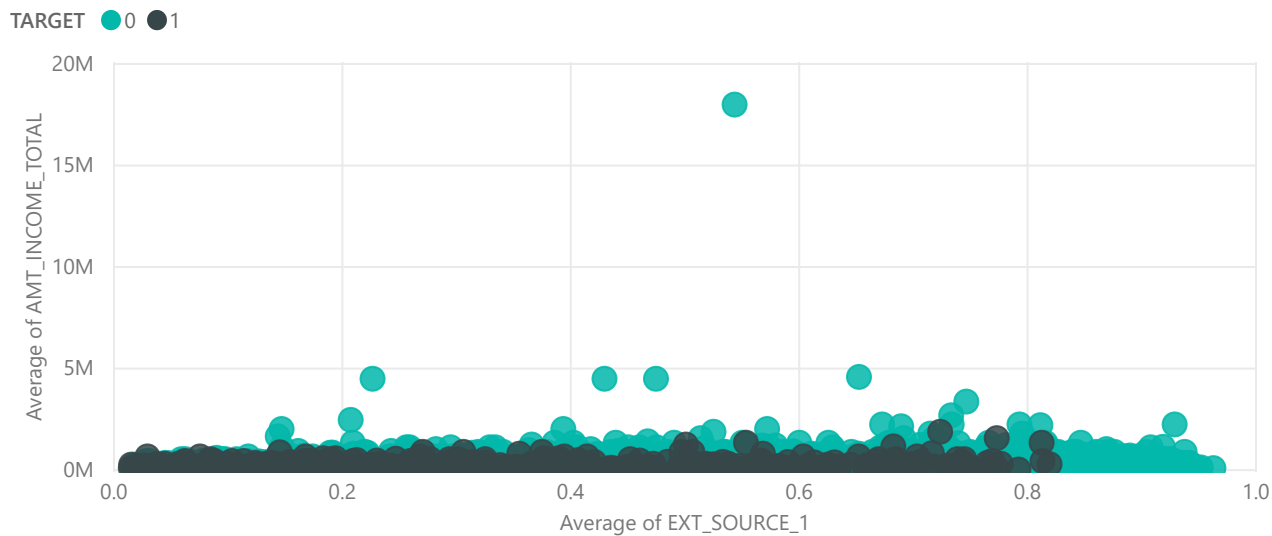
# Average Income and Credit amounts for different Income groups



The applicants with the type of income *Maternity leave* the highest average Amount credit and low Amount Income total have almost 50% ratio of not returning loans, but the number of client in that category is just 4. Can play around with the different categories and find the avg income and avg credit amounts for clients repaying/not repaying the loans

# Comparing Exterior Sources with Income and Target for Different Education Levels

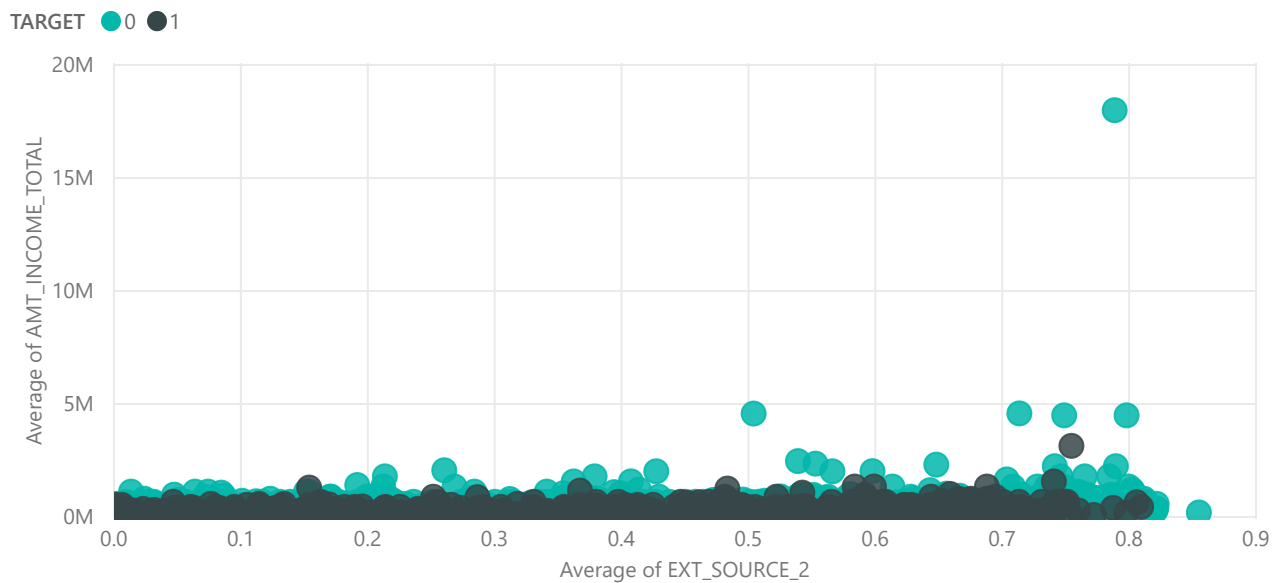
Average of EXT\_SOURCE\_1 and Average of AMT\_INCOME\_TOTAL by EXT\_SOURCE\_1 and TARGET



NAME\_EDUCATION\_TYPE

Academic degree	Incomplete higher	Secondary / secondary special
Higher education	Lower secondary	

Average of EXT\_SOURCE\_2 and Average of AMT\_INCOME\_TOTAL by EXT\_SOURCE\_2 and TARGET



Average of EXT\_SOURCE\_3 and Average of AMT\_INCOME\_TOTAL by EXT\_SOURCE\_3 and TARGET

