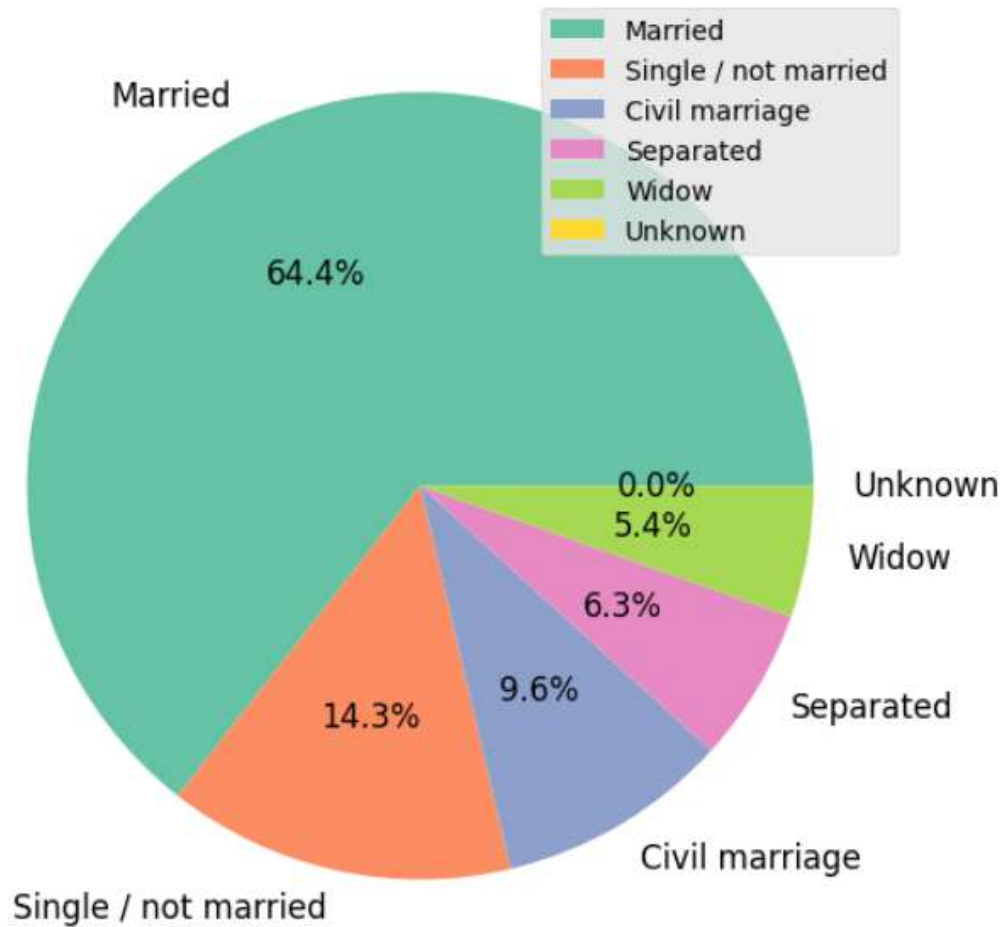
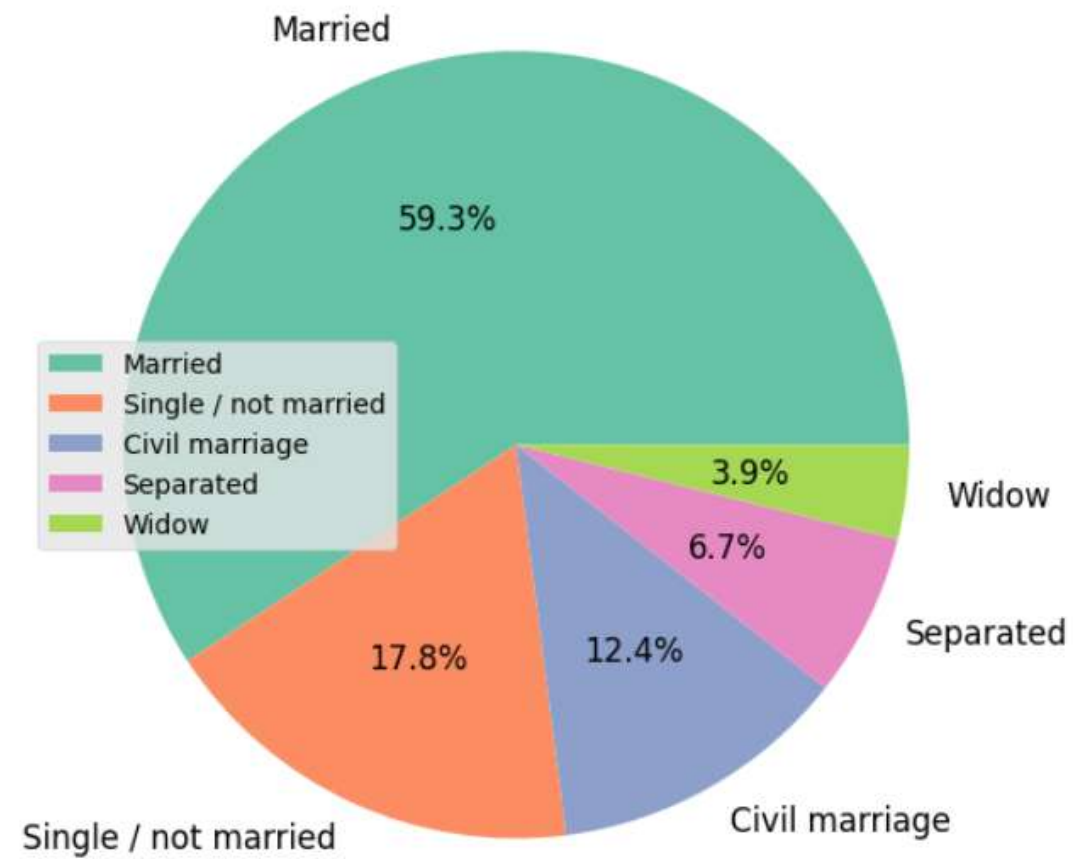


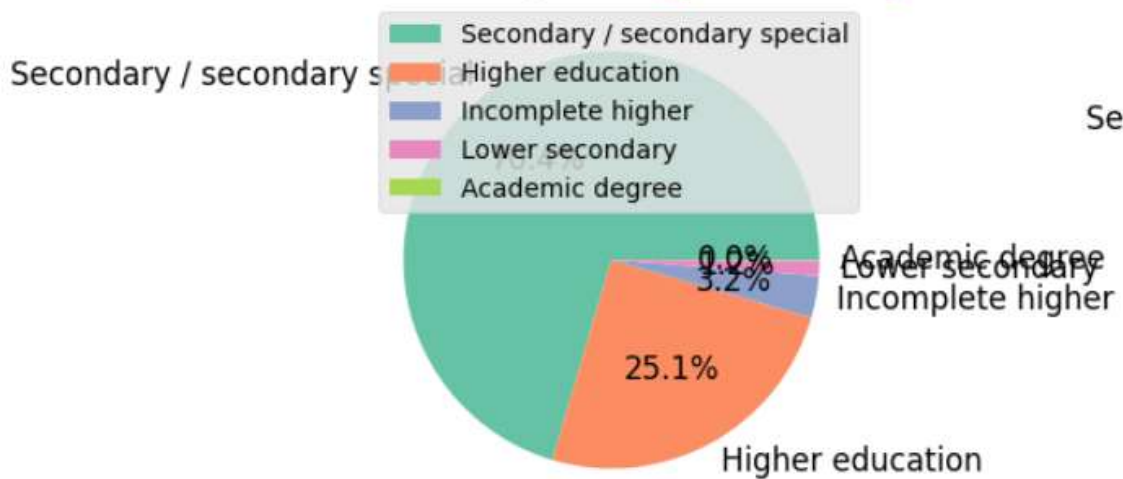
Non-Defaulters by NAME_FAMILY_STATUS



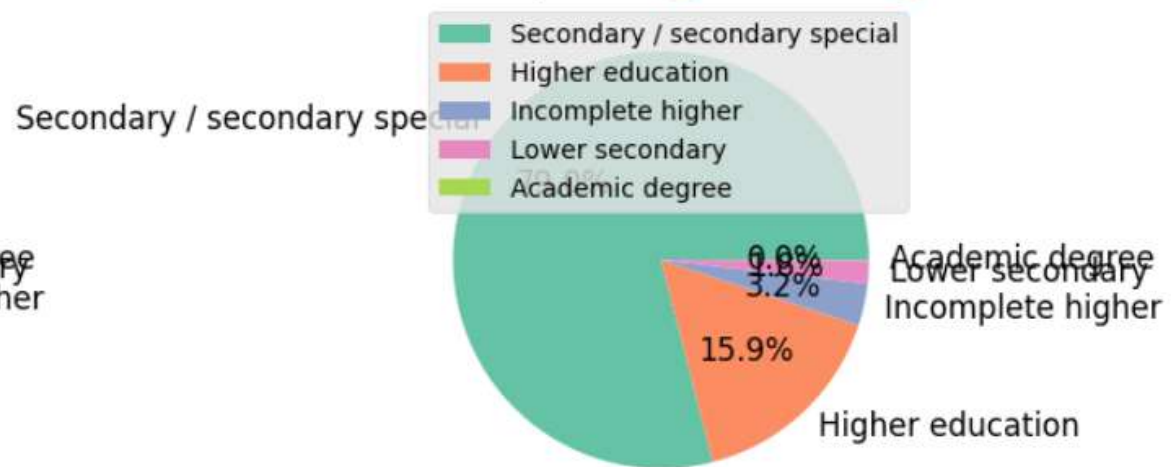
Defaulters by NAME_FAMILY_STATUS



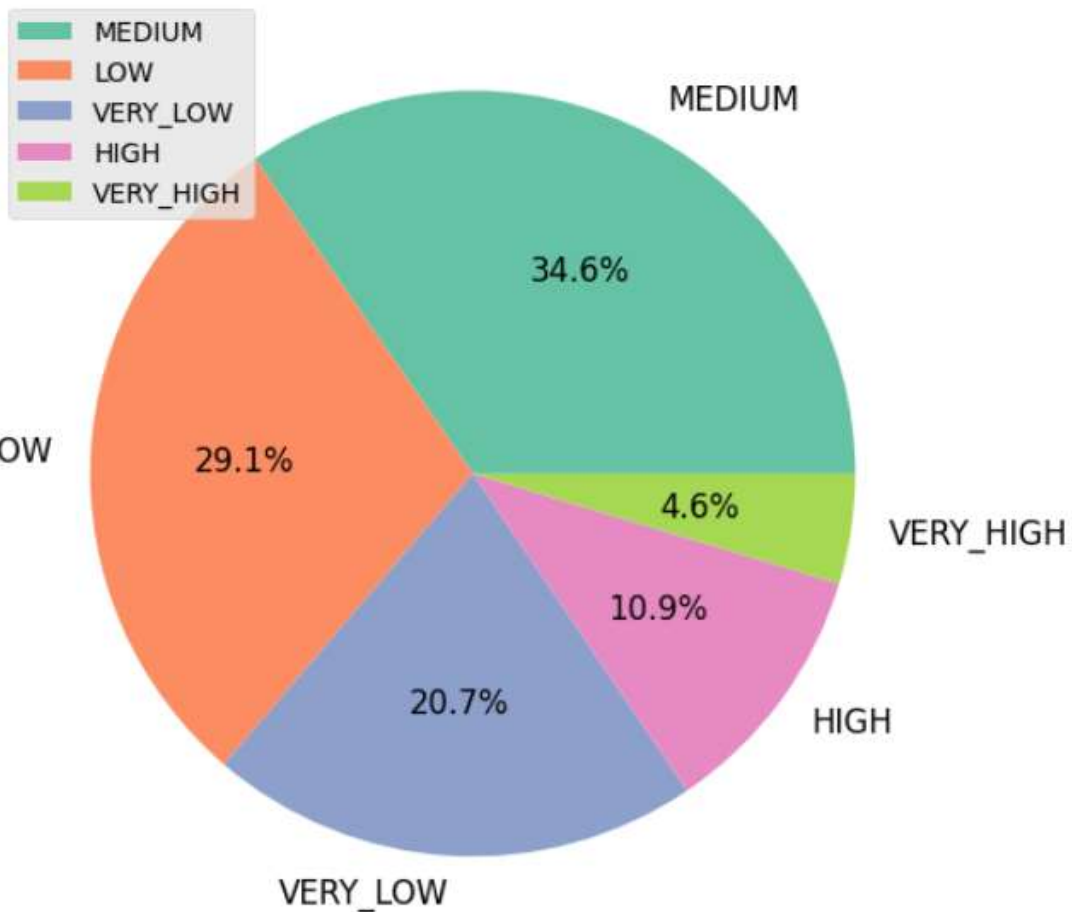
Non-Defaulters by NAME_EDUCATION_TYPE



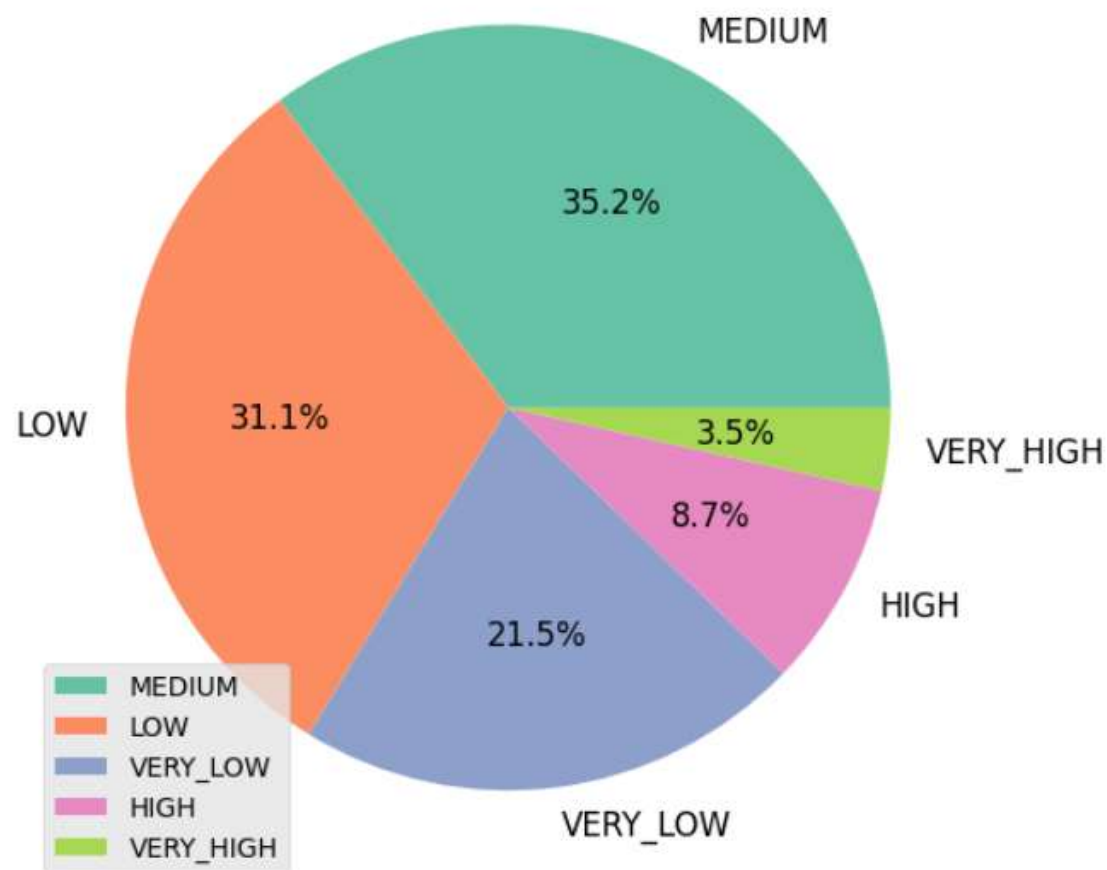
Defaulters by NAME_EDUCATION_TYPE



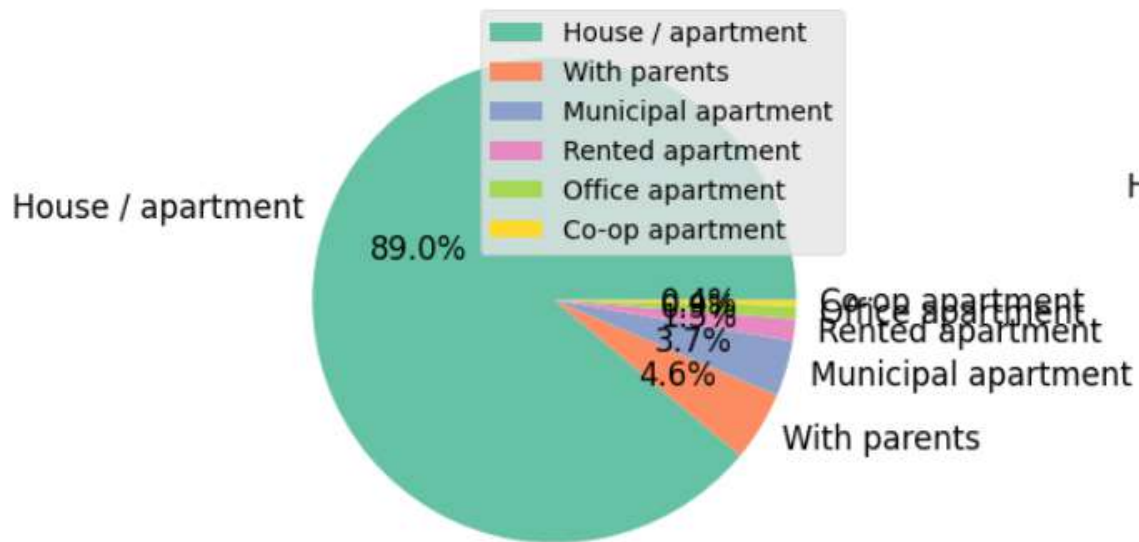
Non-Defaulters by AMT_INCOME_RANGE



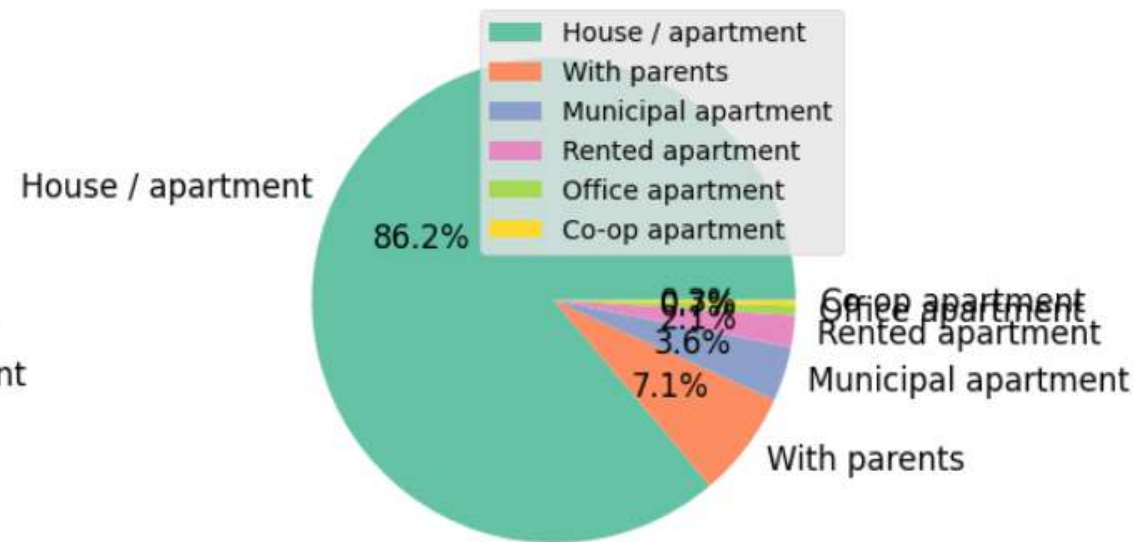
Defaulters by AMT_INCOME_RANGE



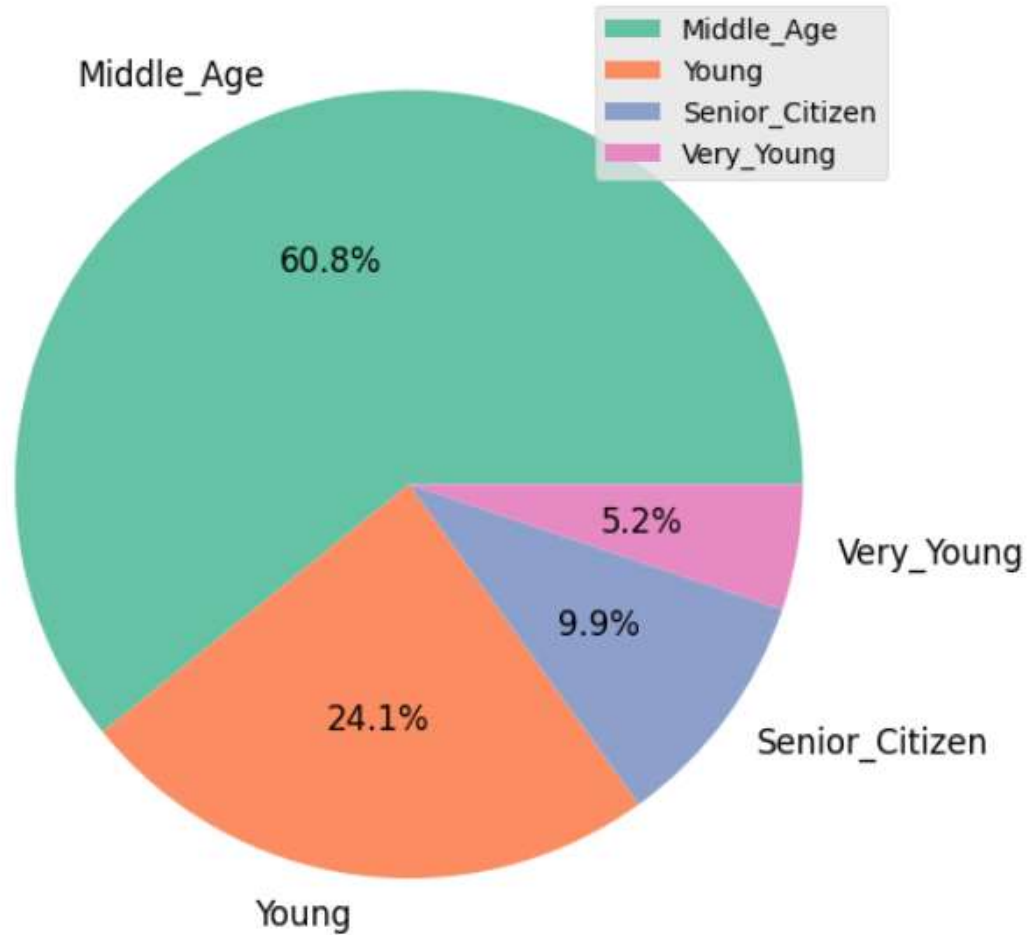
Non-Defaulters by NAME_HOUSING_TYPE



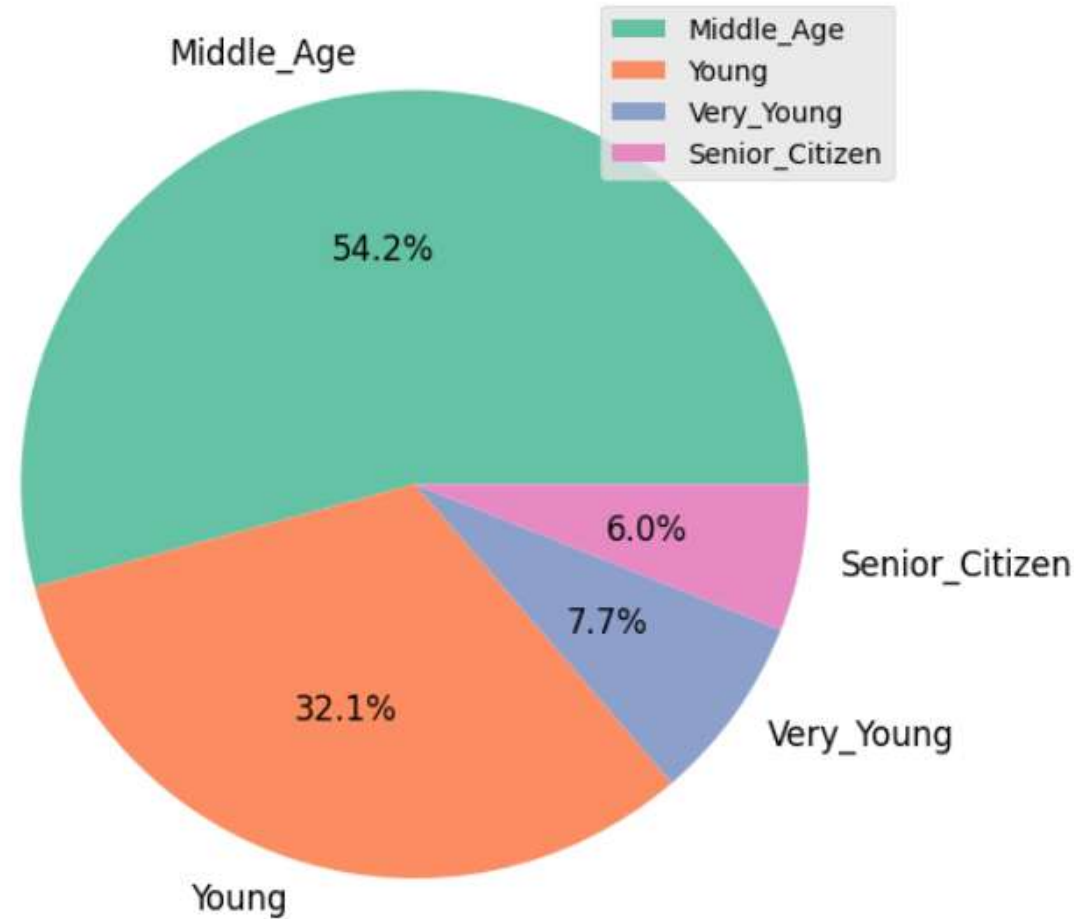
Defaulters by NAME_HOUSING_TYPE



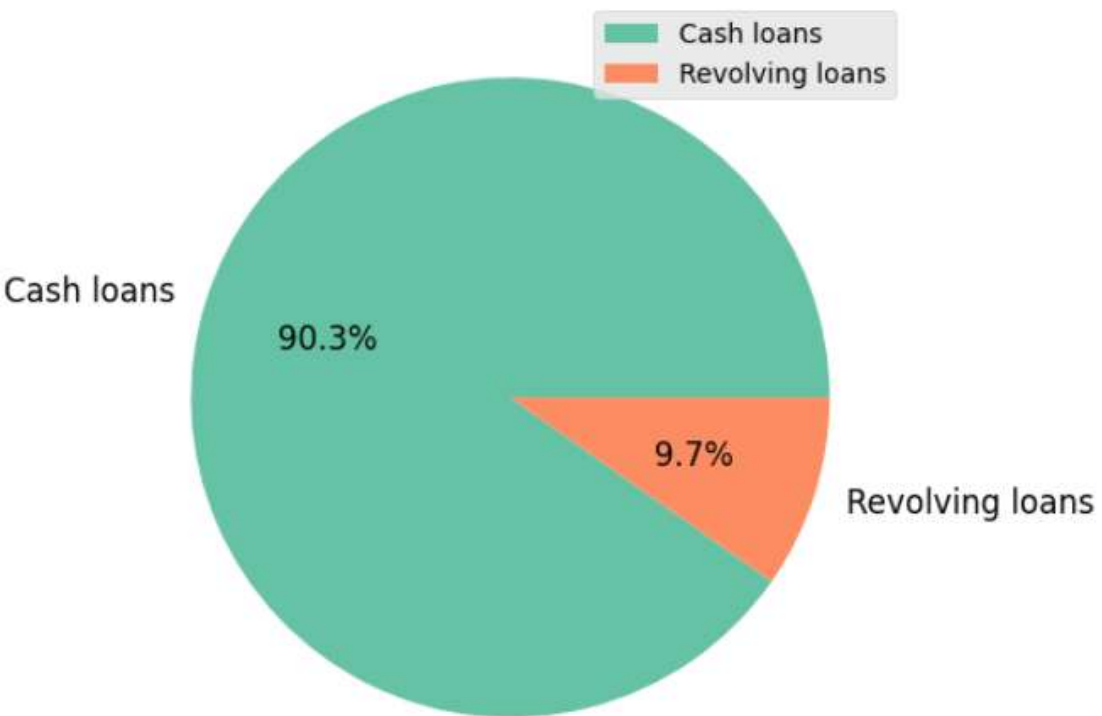
Non-Defaulters by DAYS_BIRTH_BINS



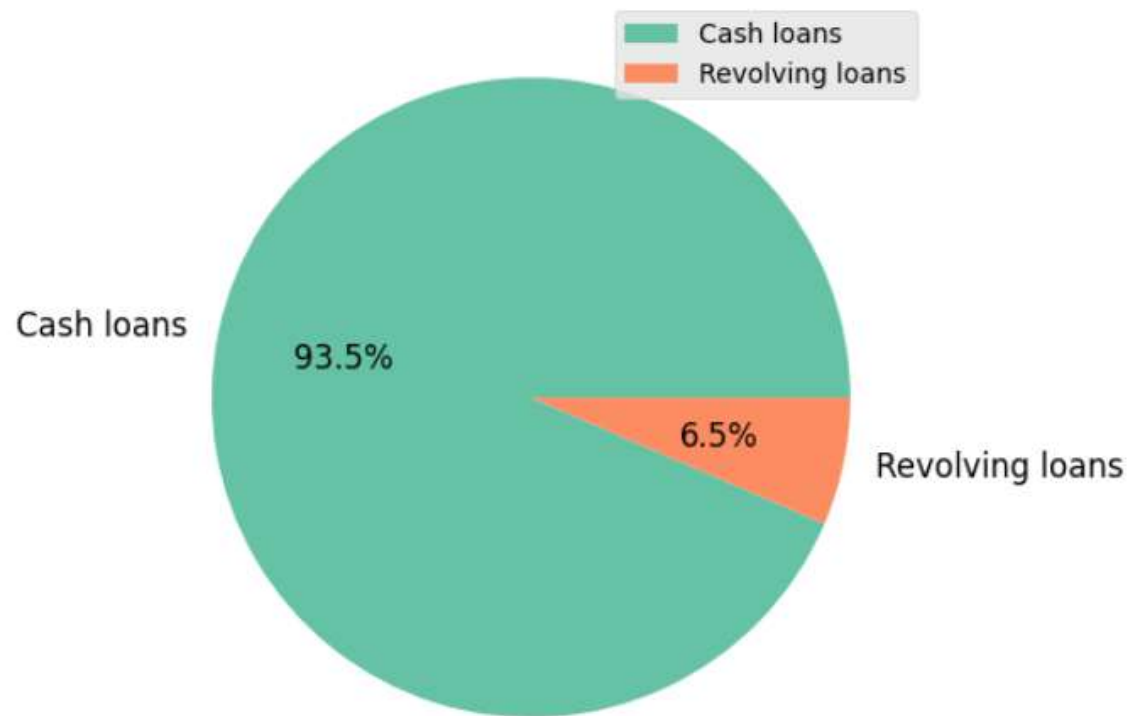
Defaulters by DAYS_BIRTH_BINS



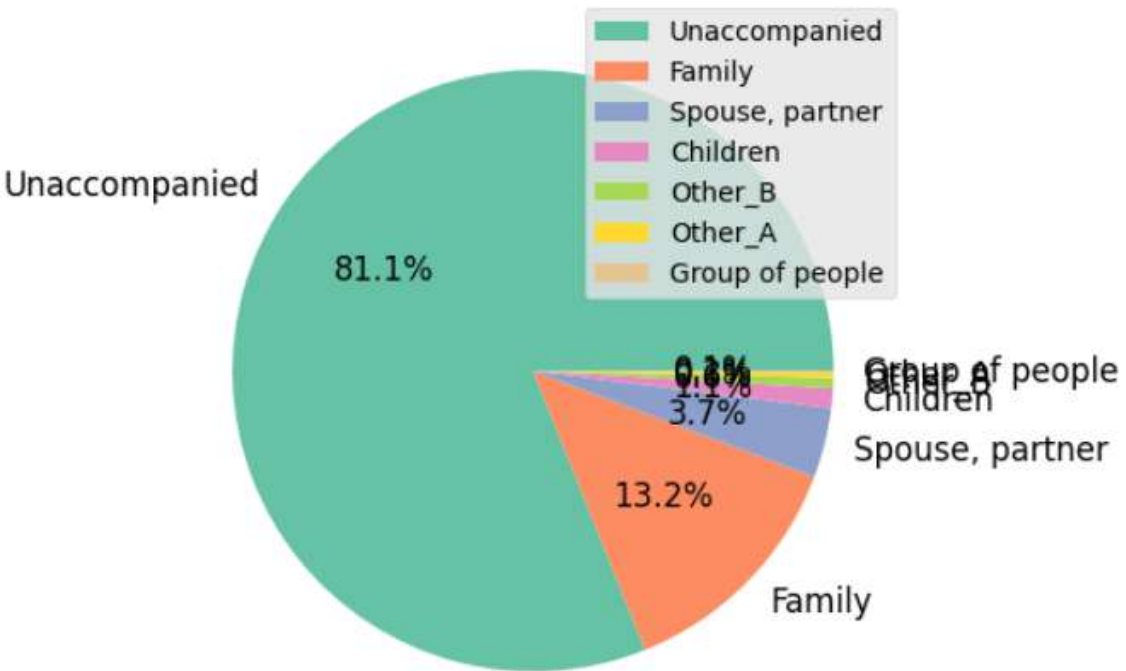
Non-Defaulters by NAME_CONTRACT_TYPE



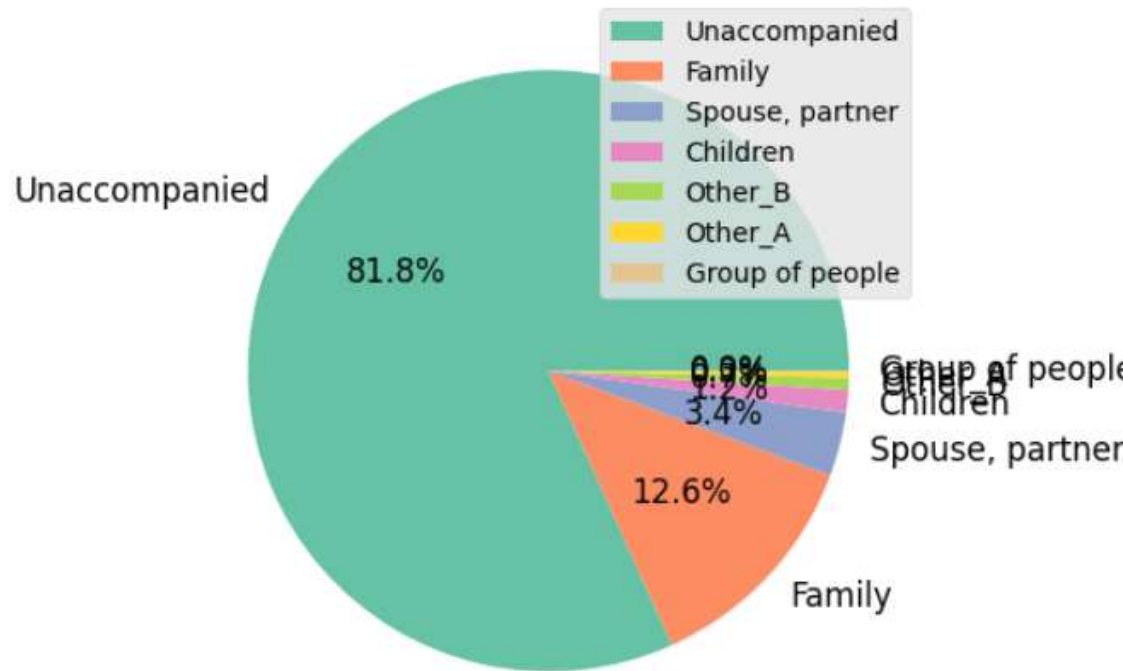
Defaulters by NAME_CONTRACT_TYPE

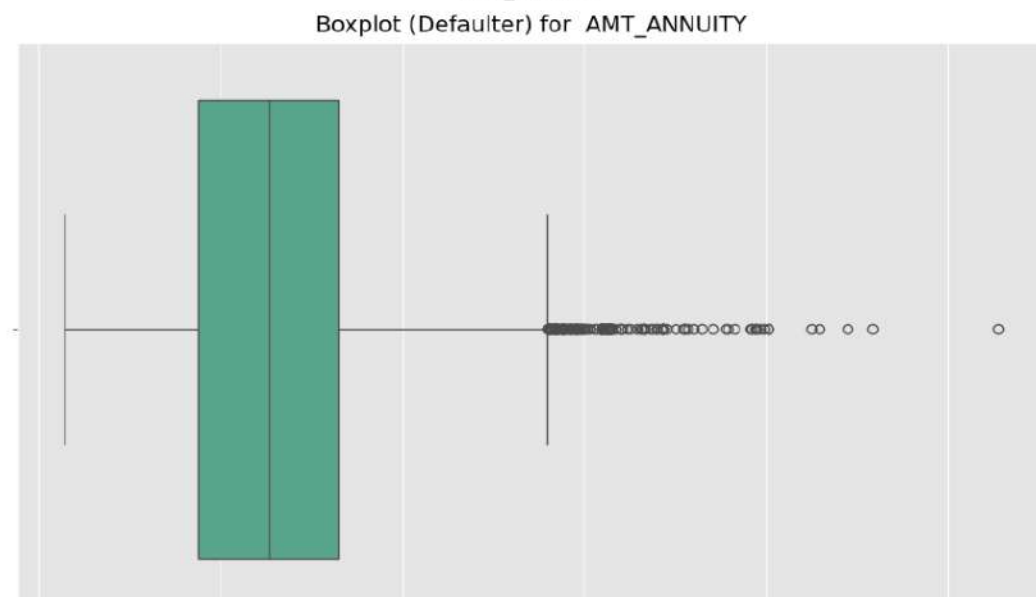
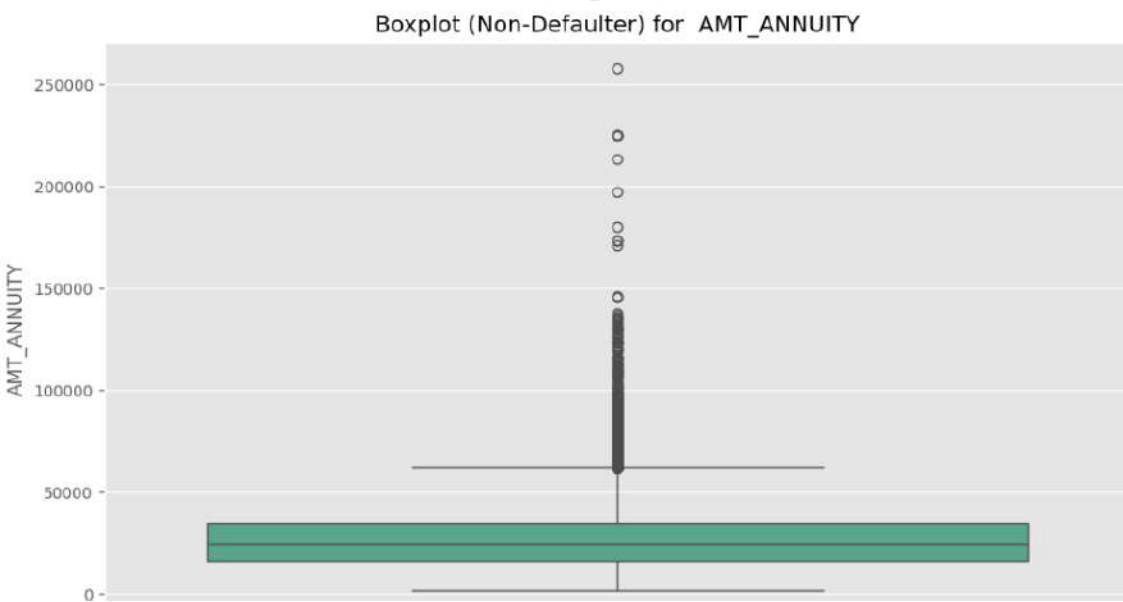
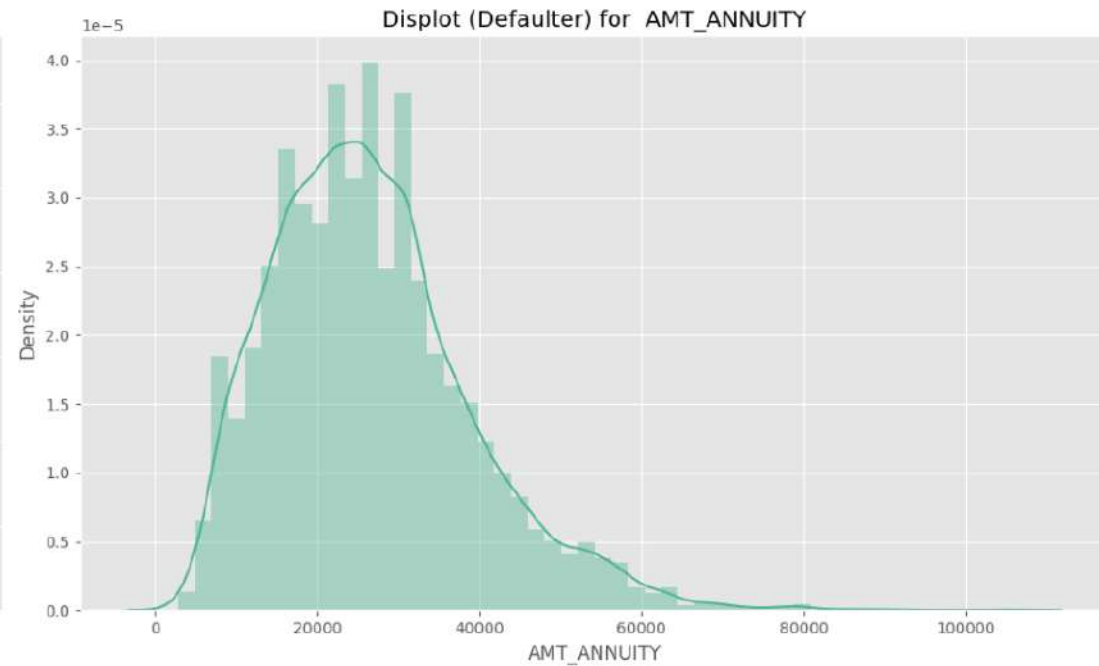
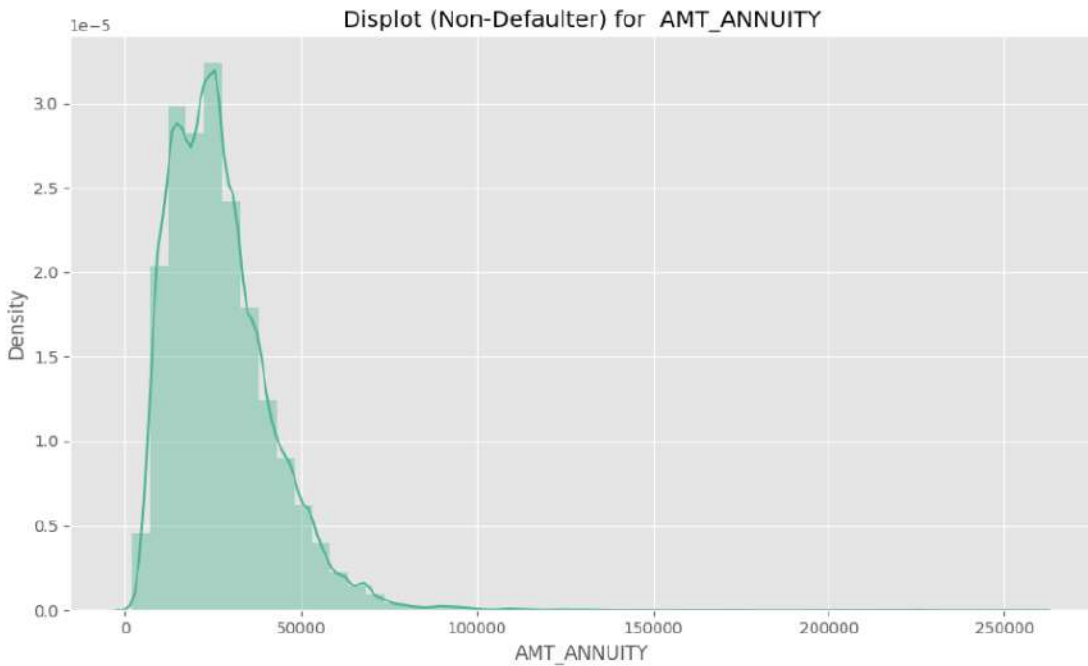


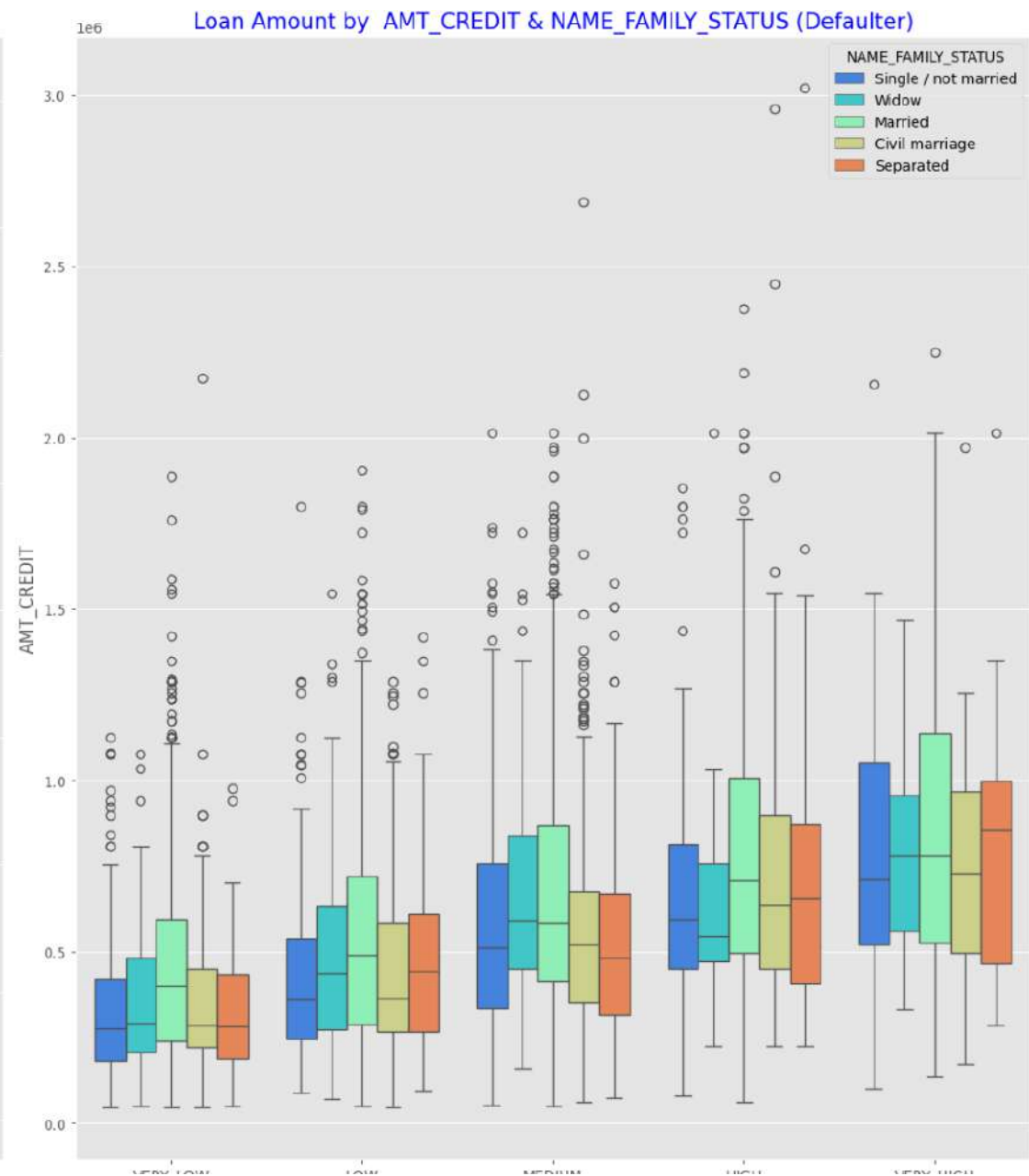
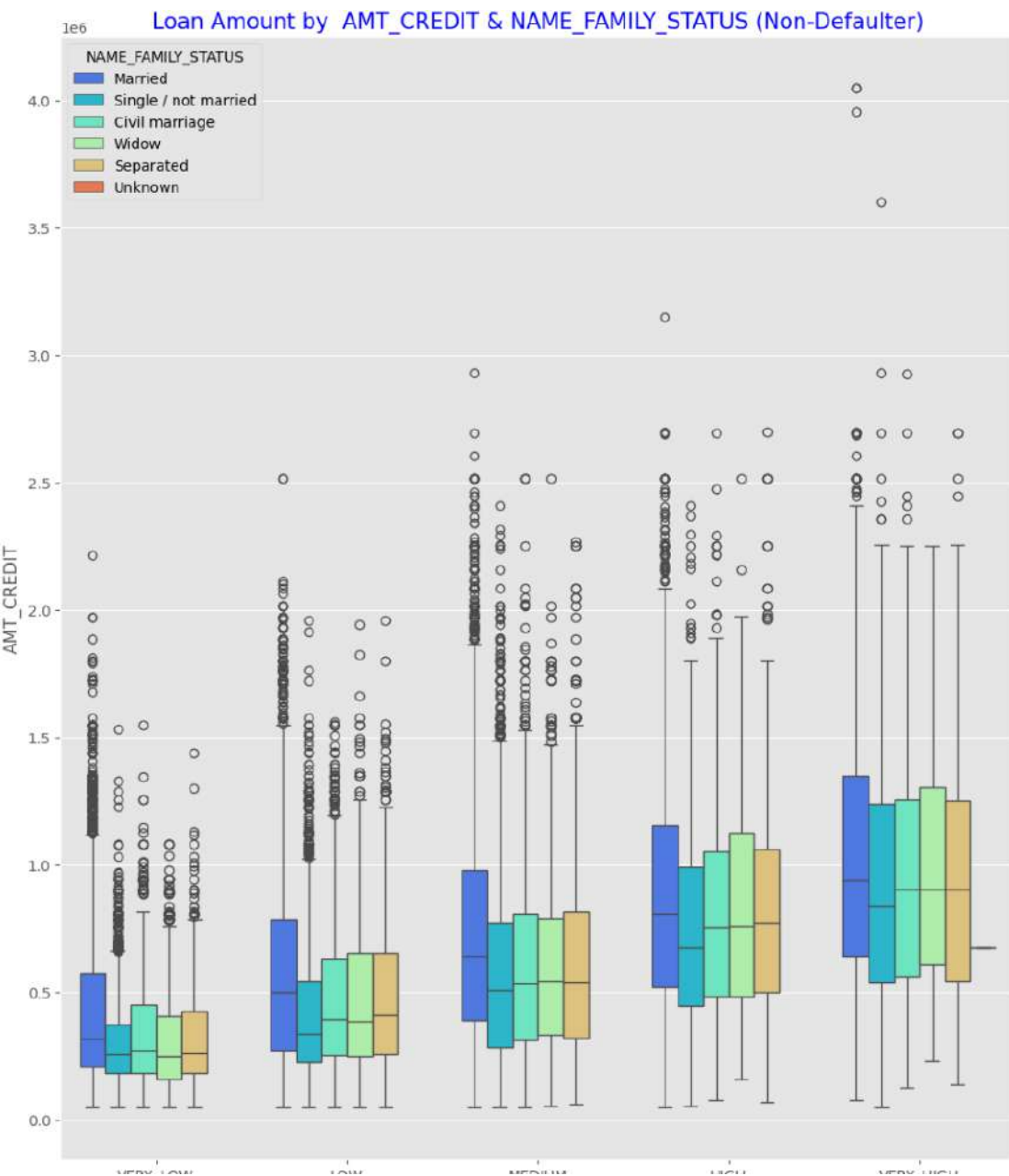
Non-Defaulters by NAME_TYPE_SUITE



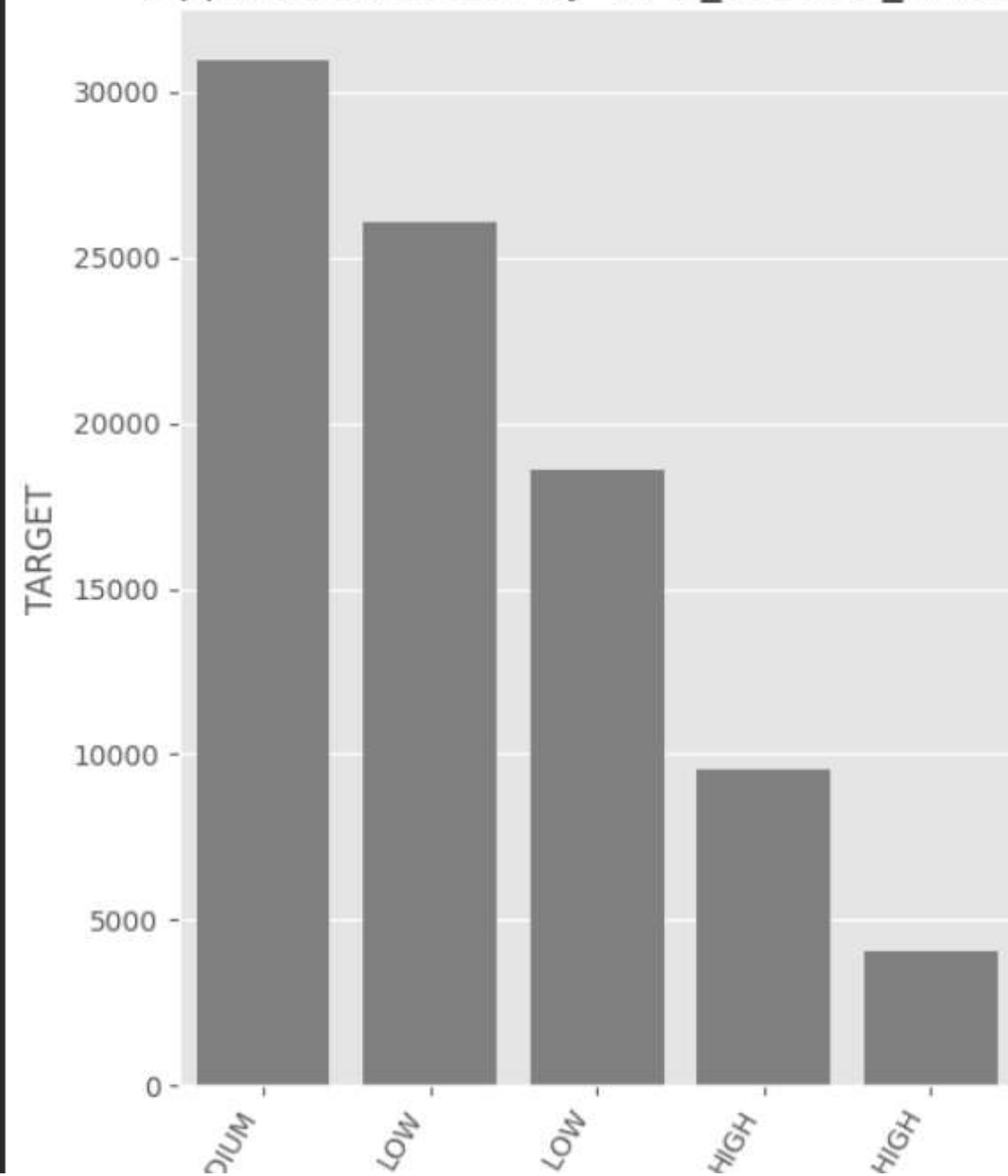
Defaulters by NAME_TYPE_SUITE



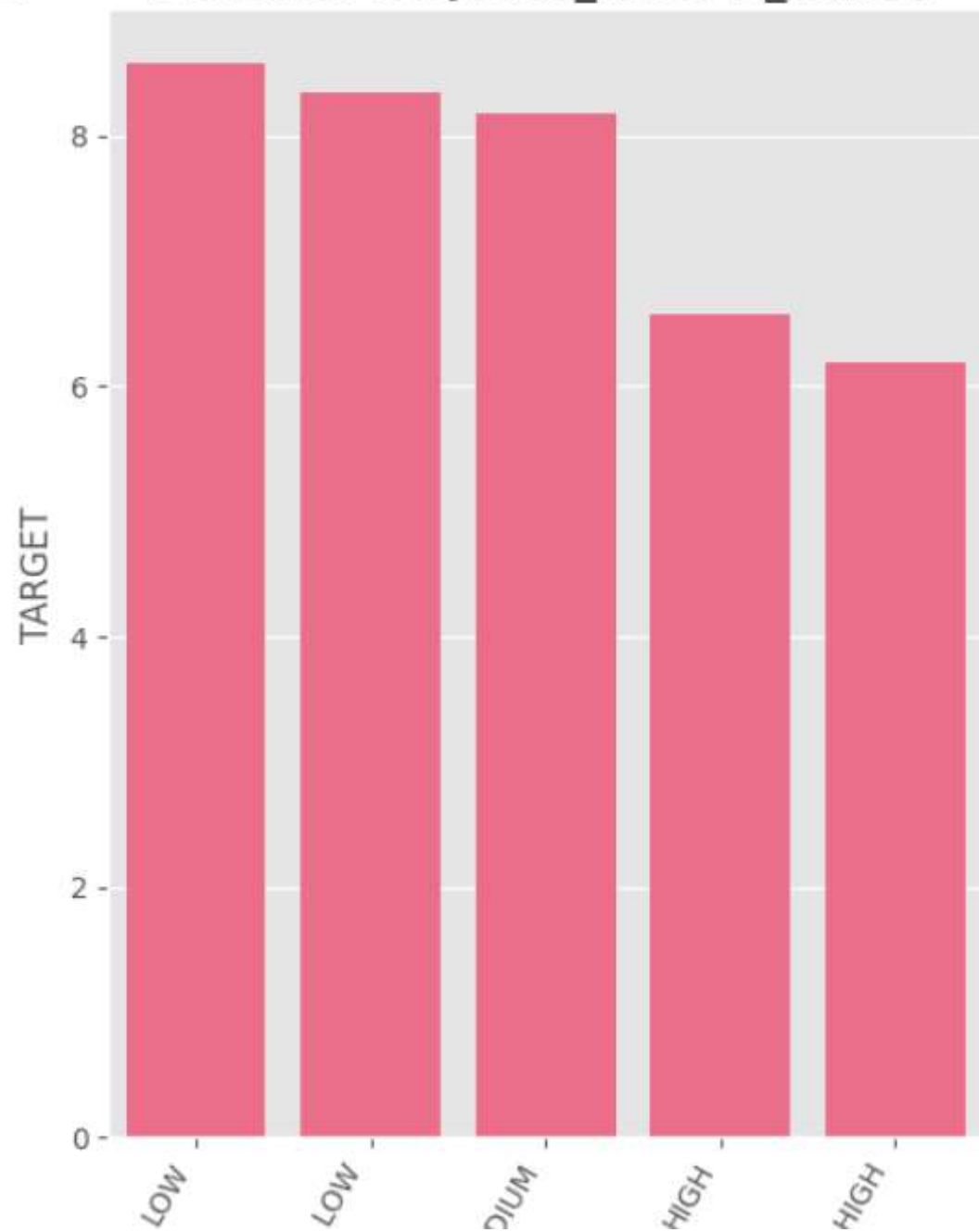




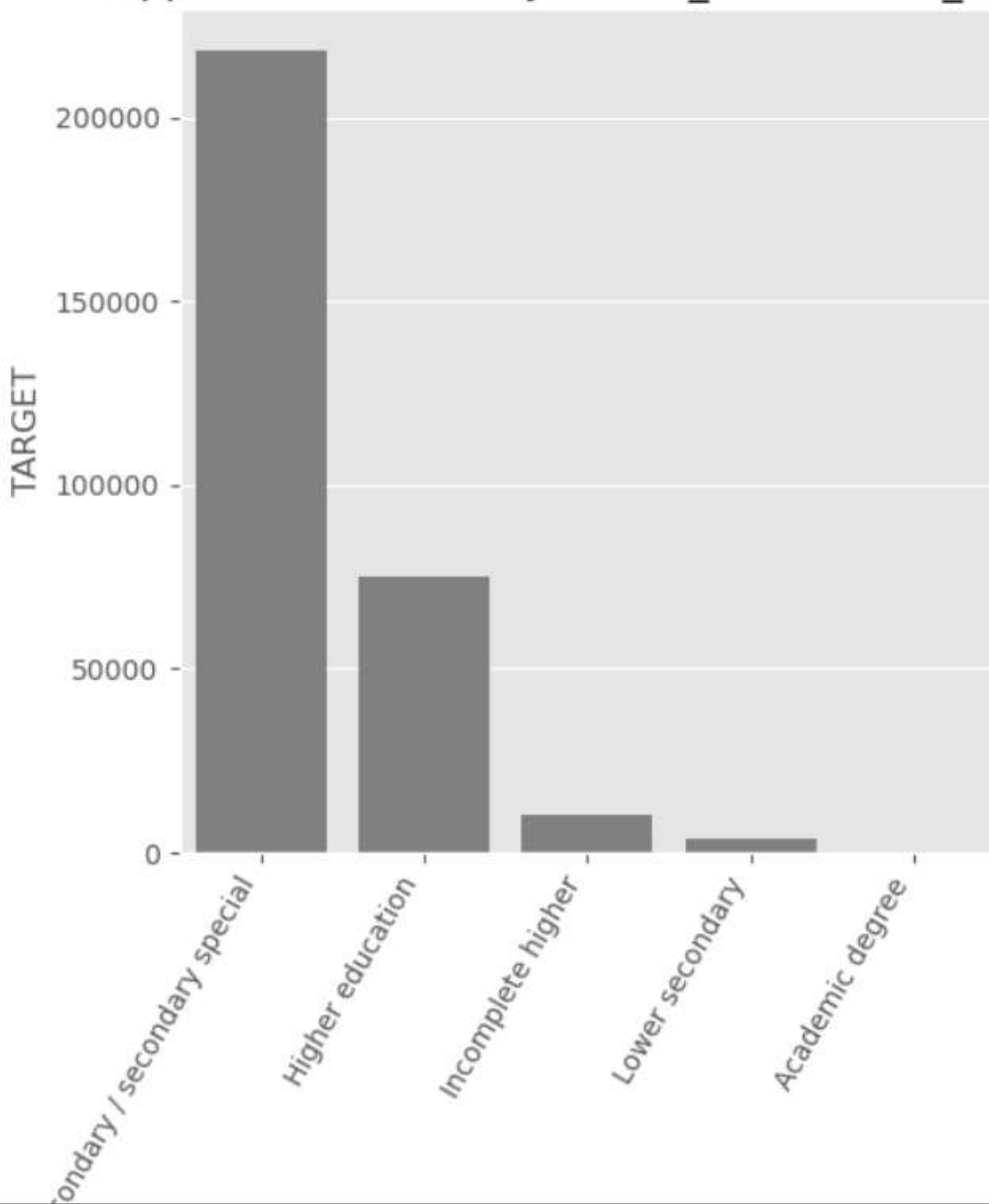
Application Counts by AMT_INCOME_RANGE



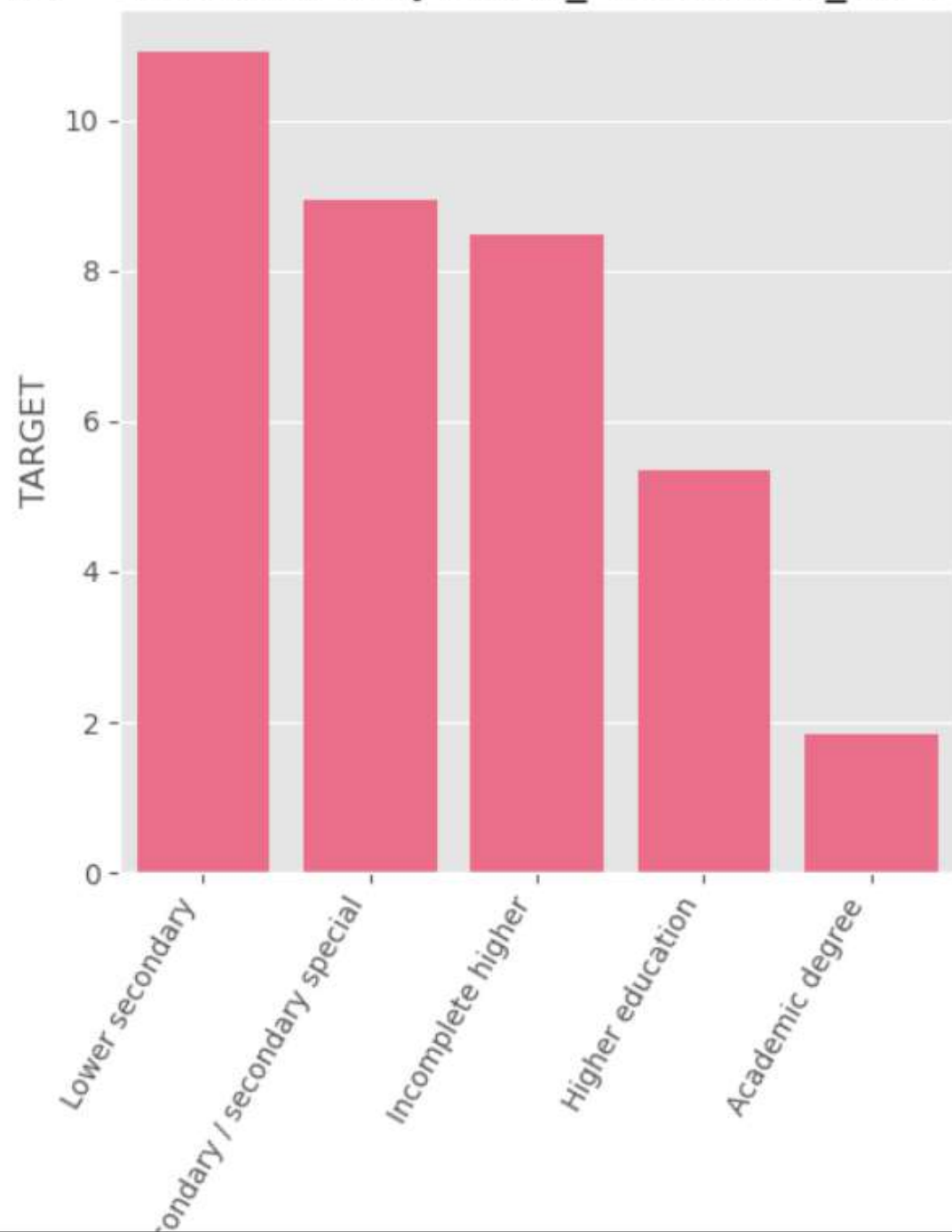
Derailer % by AMT_INCOME_RANGE



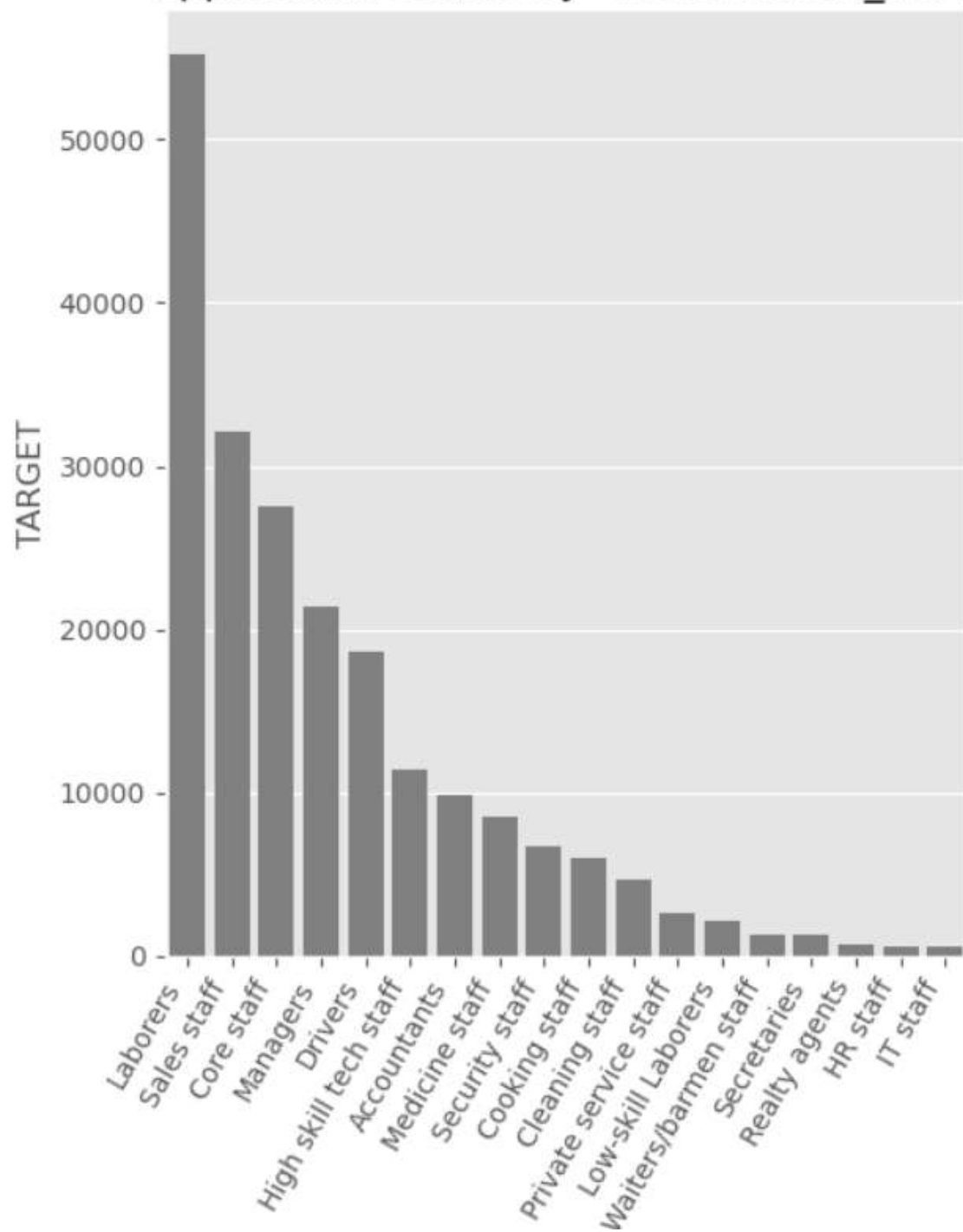
Application Counts by NAME_EDUCATION_TYPE



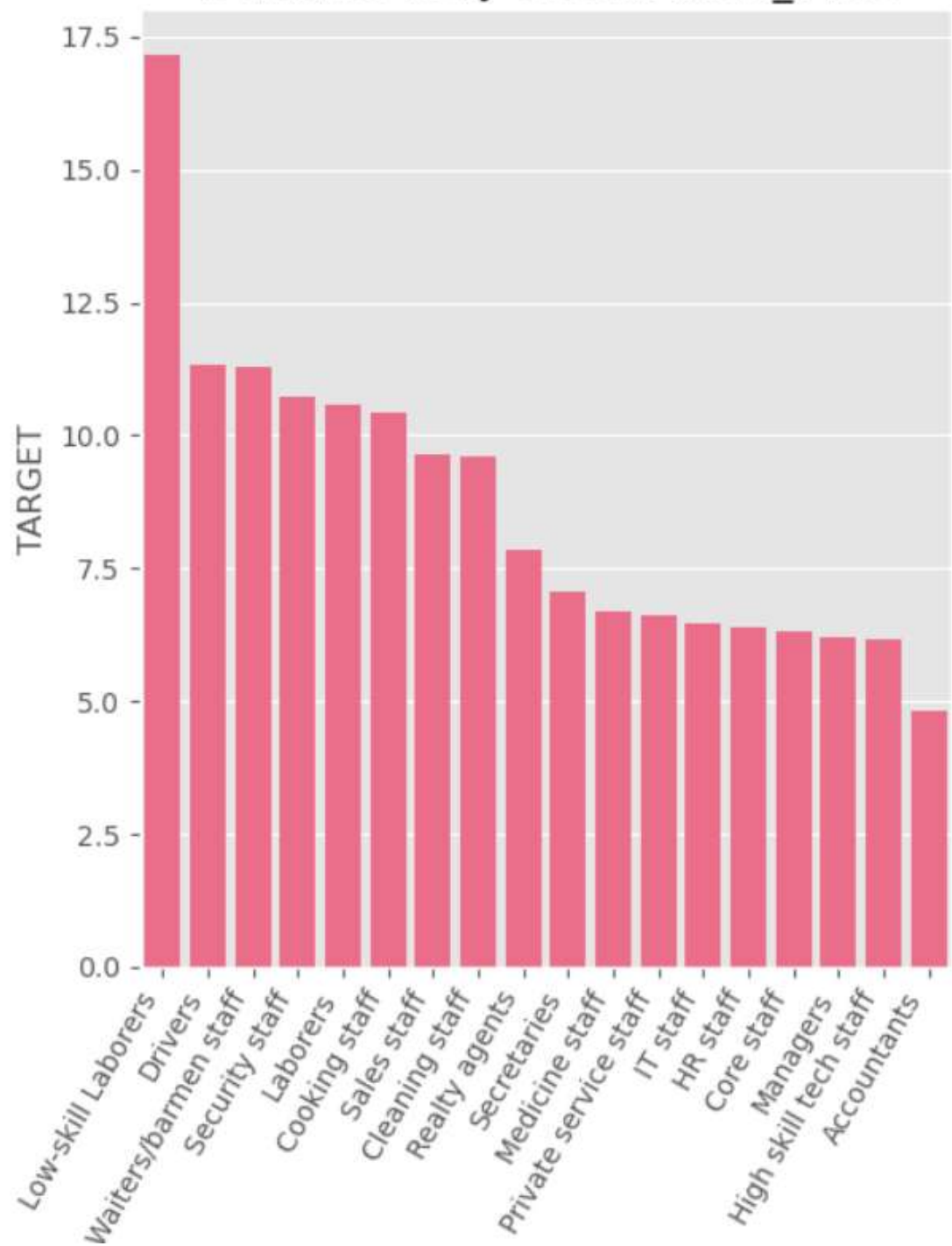
Defaulter % by NAME_EDUCATION_TYPE

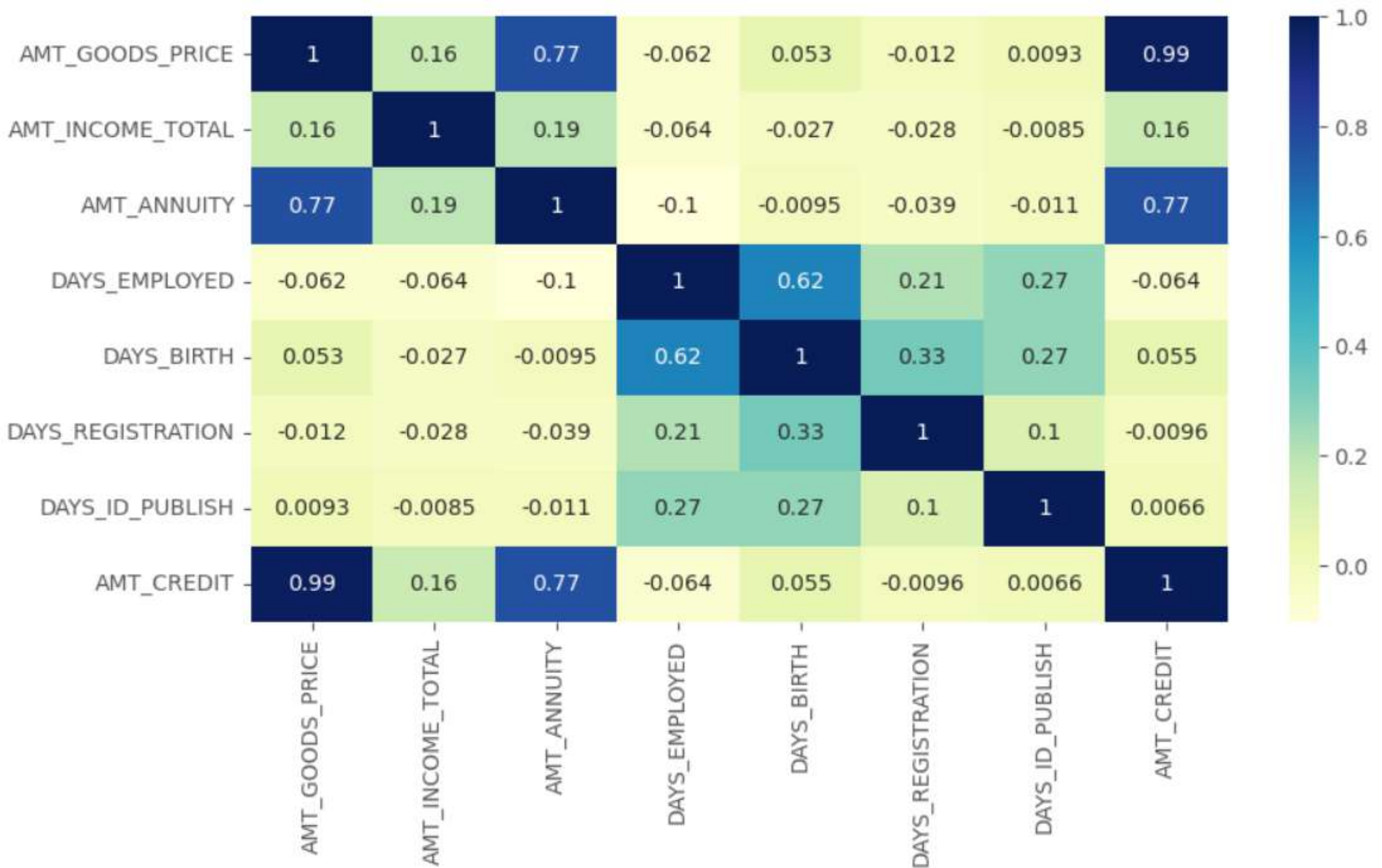


Application Counts by OCCUPATION_TYPE



Defaulter % by OCCUPATION_TYPE







Final Insights: Loan Default EDA Project

1. Gender and Default

- **Men** are more likely to **default** compared to women.
- Although fewer in the overall applicant pool, their default percentage is **disproportionately higher**.

2. Income and Default

- Applicants with **low income** are more likely to default.
- **Higher income groups** show lower default percentages, indicating income stability reduces risk.

3. Education and Default

- **Higher education** is associated with **fewer defaults**.
- Applicants with **lower educational levels** tend to have higher default rates.

4. Employment and Default

- **Unemployed and lower-tenure employees** have a higher chance of default.
- People with **stable, long-term jobs** tend to repay loans better.

5. Loan & Credit Correlation

- **AMT_CREDIT**, **AMT_ANNUITY**, and **AMT_GOODS_PRICE** are strongly correlated.
- Higher loan amounts are associated with higher annuities and more expensive goods.

6. Age and Default

- **Younger individuals** are more likely to default.
- Older applicants are generally more financially responsible or cautious.

7. Family Status & Income

- **Married applicants** and those in **civil marriages** generally show better repayment behavior.
- Family stability and dual-income households may contribute to this.

8. Drilldown Analysis

- Specific segments (e.g., **low-income + low education**) show **very high default %**.
- Can help design targeted lending rules and risk-mitigation strategies.

Conclusion

Demographic, financial, and behavioral features like **gender, age, income, education, and employment status** play a critical role in determining **loan default risk**. These insights can guide:

- **Risk-based loan approvals**
- **Targeted credit policies**
- **Financial education initiatives**
to reduce future defaults and build a healthier loan portfolio.