Credit EDA Assignment

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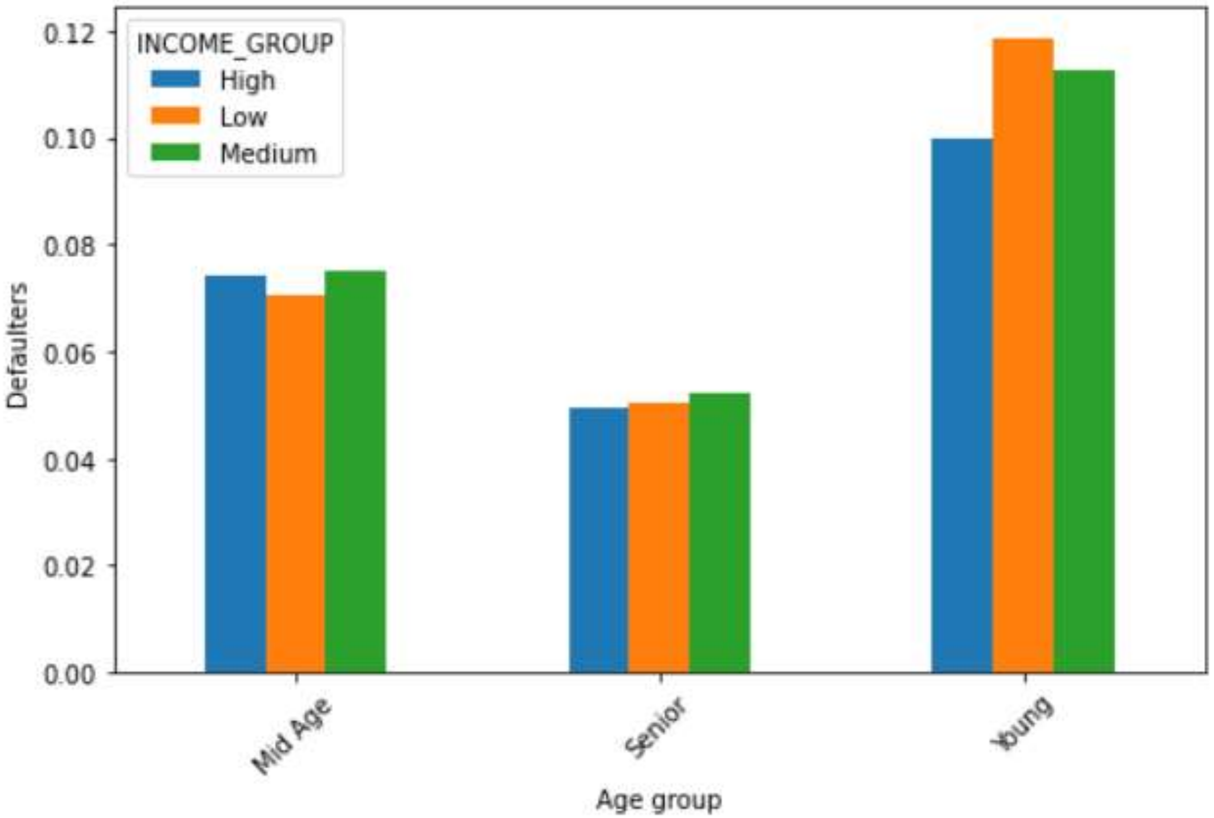
Income and age



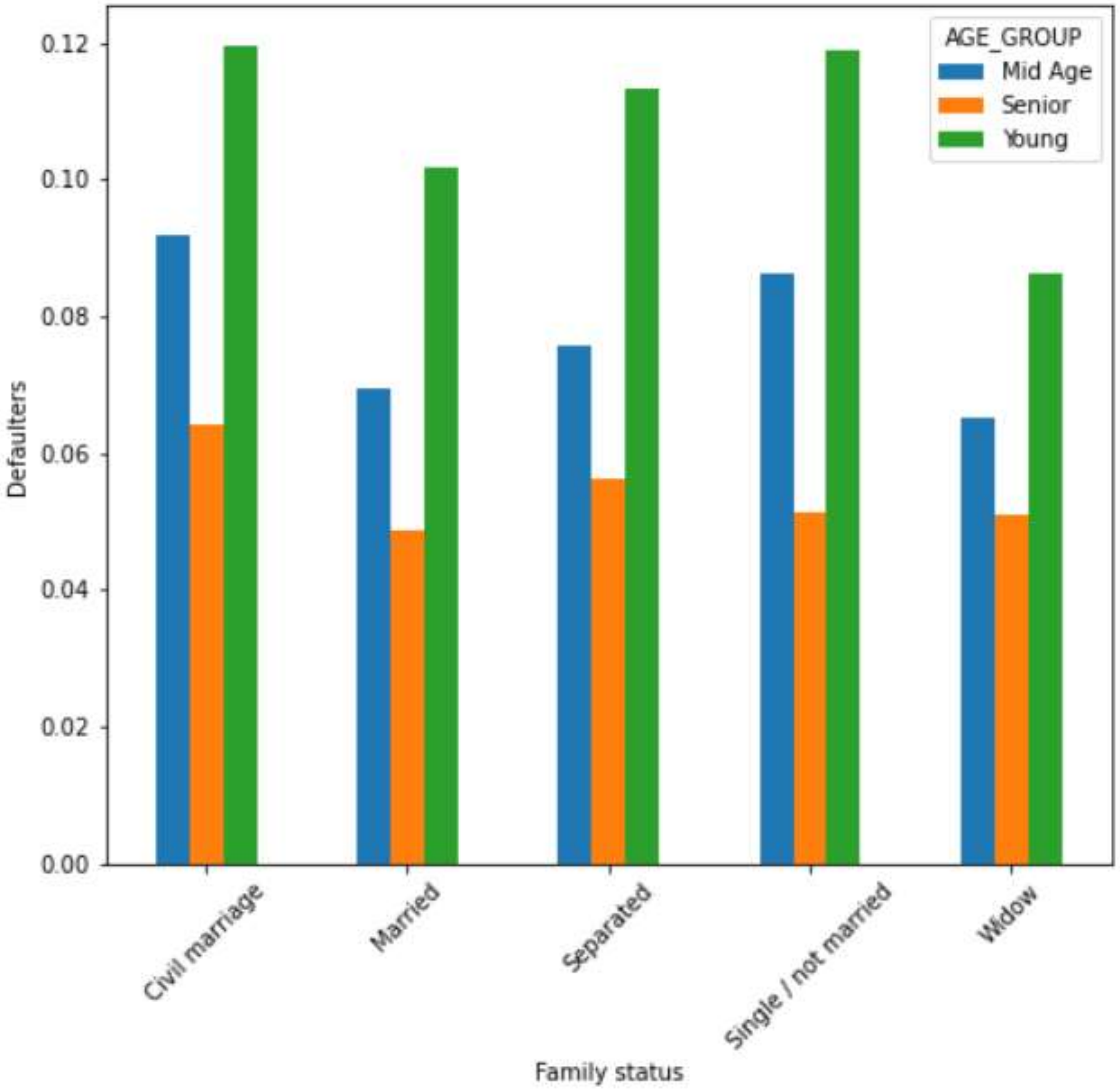
Insights:

- Individuals with higher income levels exhibit lower default rates, while those in lower income brackets are comparatively more likely to default.
- Both middle-aged and senior individuals across all income groups demonstrate lower default rates.

- **Recommendations**:

- It is advisable to consider loan approvals with higher confidence for mid-aged and senior clients possessing higher incomes, as they show a lower likelihood of default.
- Caution should be exercised when granting loans to young individuals in lower income groups, as they pose a higher risk of default.

Family status and age



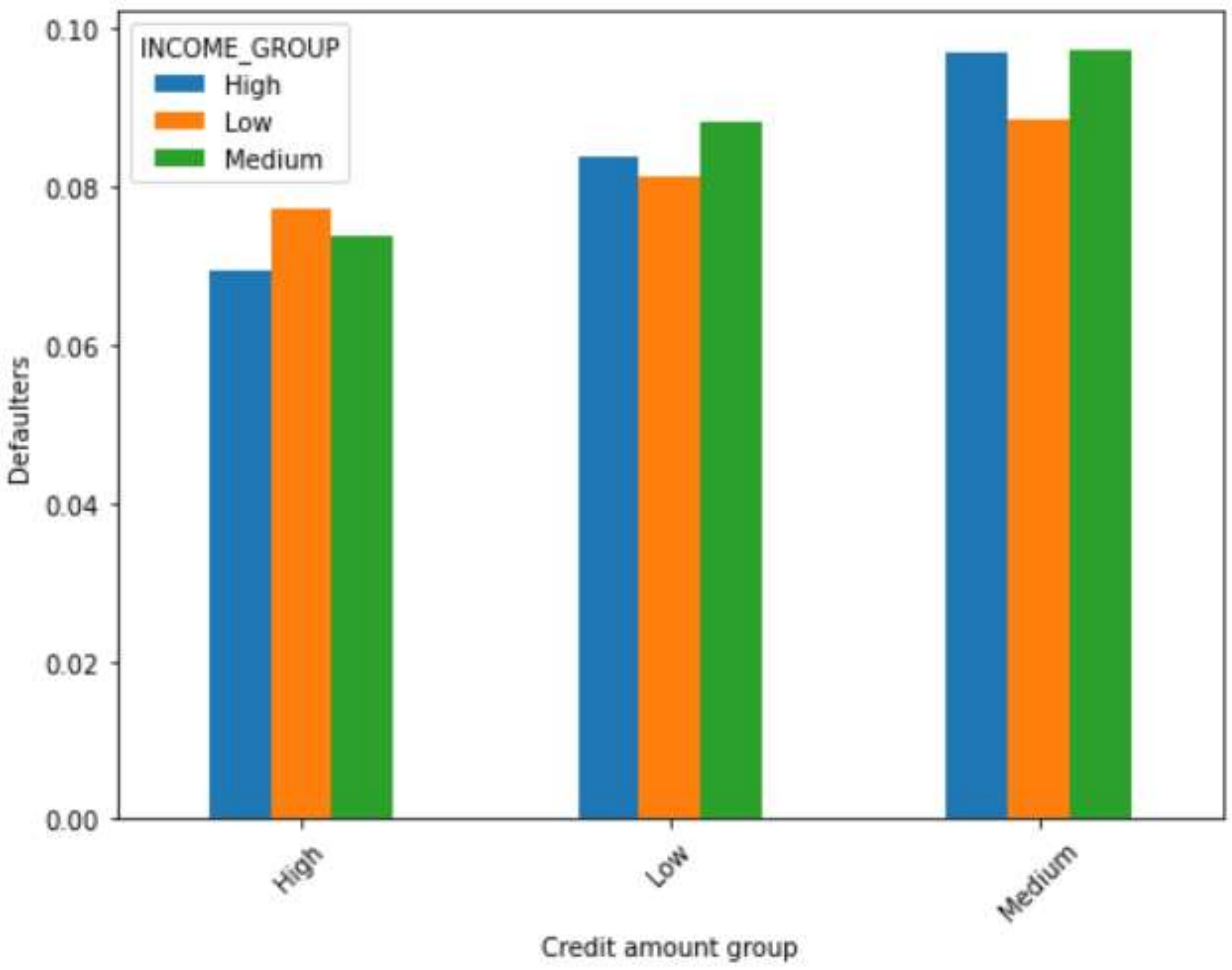
Insights:

- Senior individuals, regardless of family status, demonstrate a lower likelihood of defaulting on loans.
- Young individuals, across all family statuses, exhibit a higher propensity for loan default.

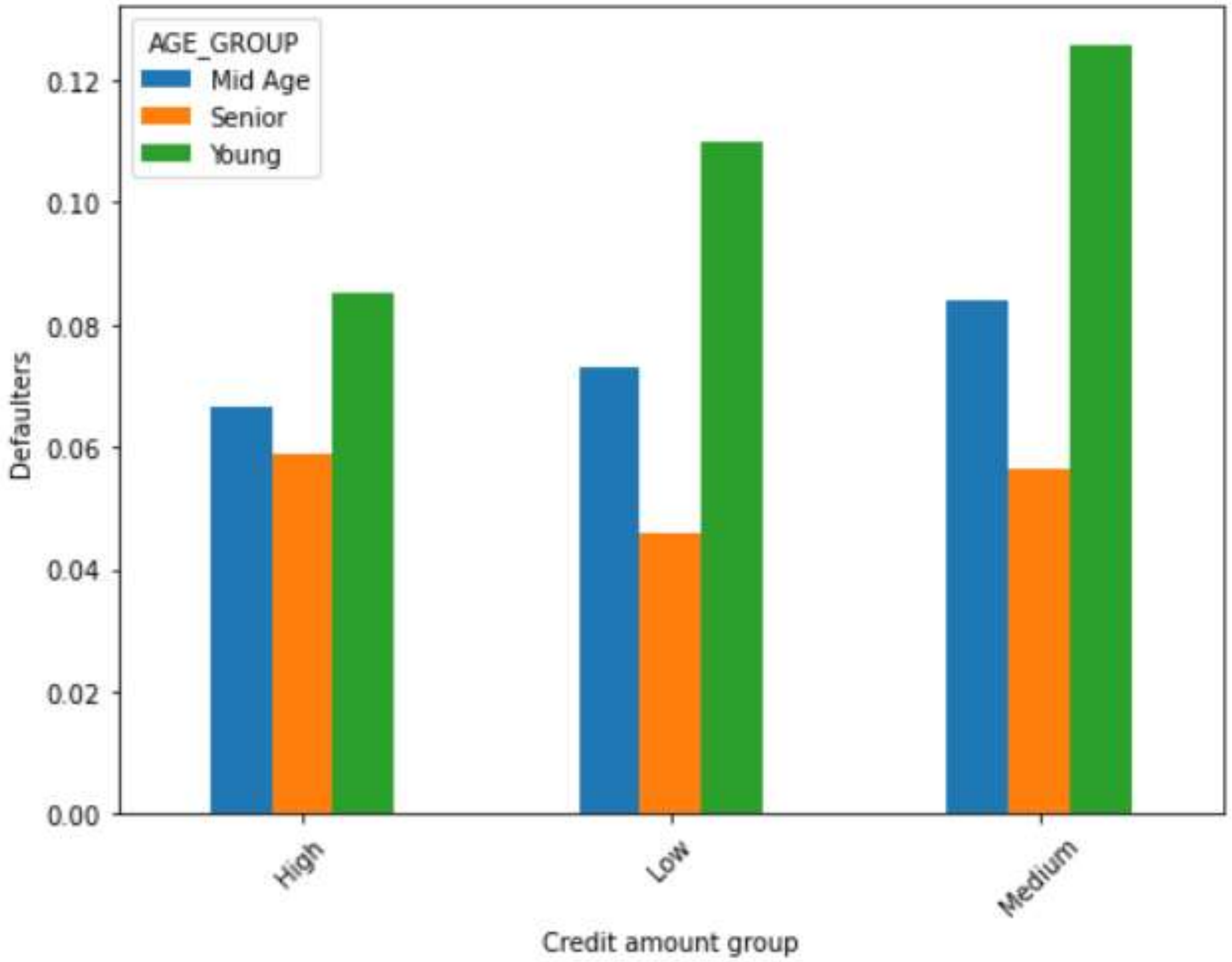
• Recommendations:

- It is advisable to consider loan approvals with greater confidence for senior citizens across various family statuses, as they show a consistent lower risk of default.
- Caution is advised when granting loans to young, single, separated, and civil-marriage individuals, as they present a higher risk of default.

Credit amount and income



Credit amount and age



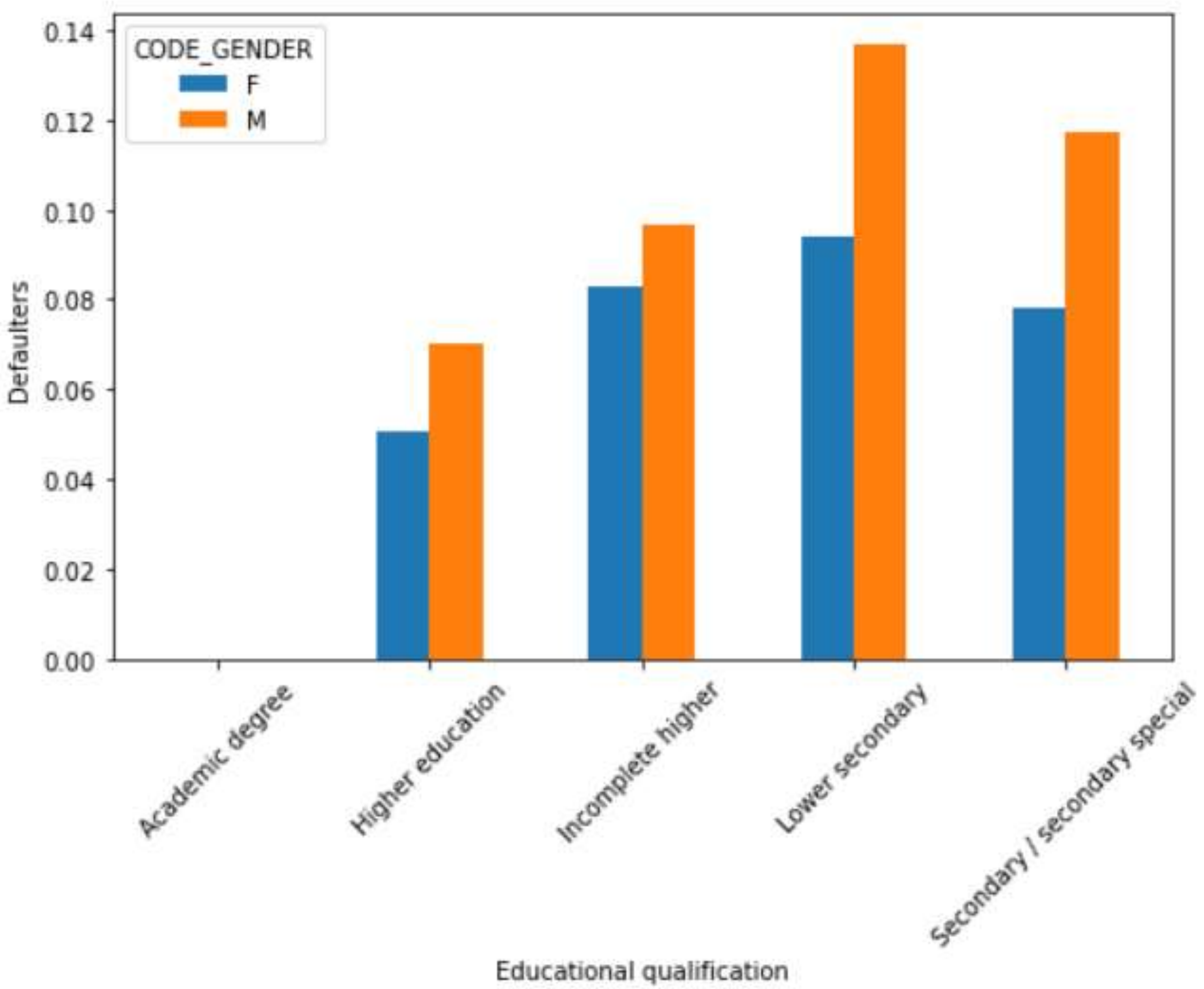
Insights:

- Clients with a moderate amount of credit, irrespective of income groups, exhibit a higher default rate compared to those with low or high credit amounts.
- Young clients who receive medium and low credit amounts are more prone to defaults.

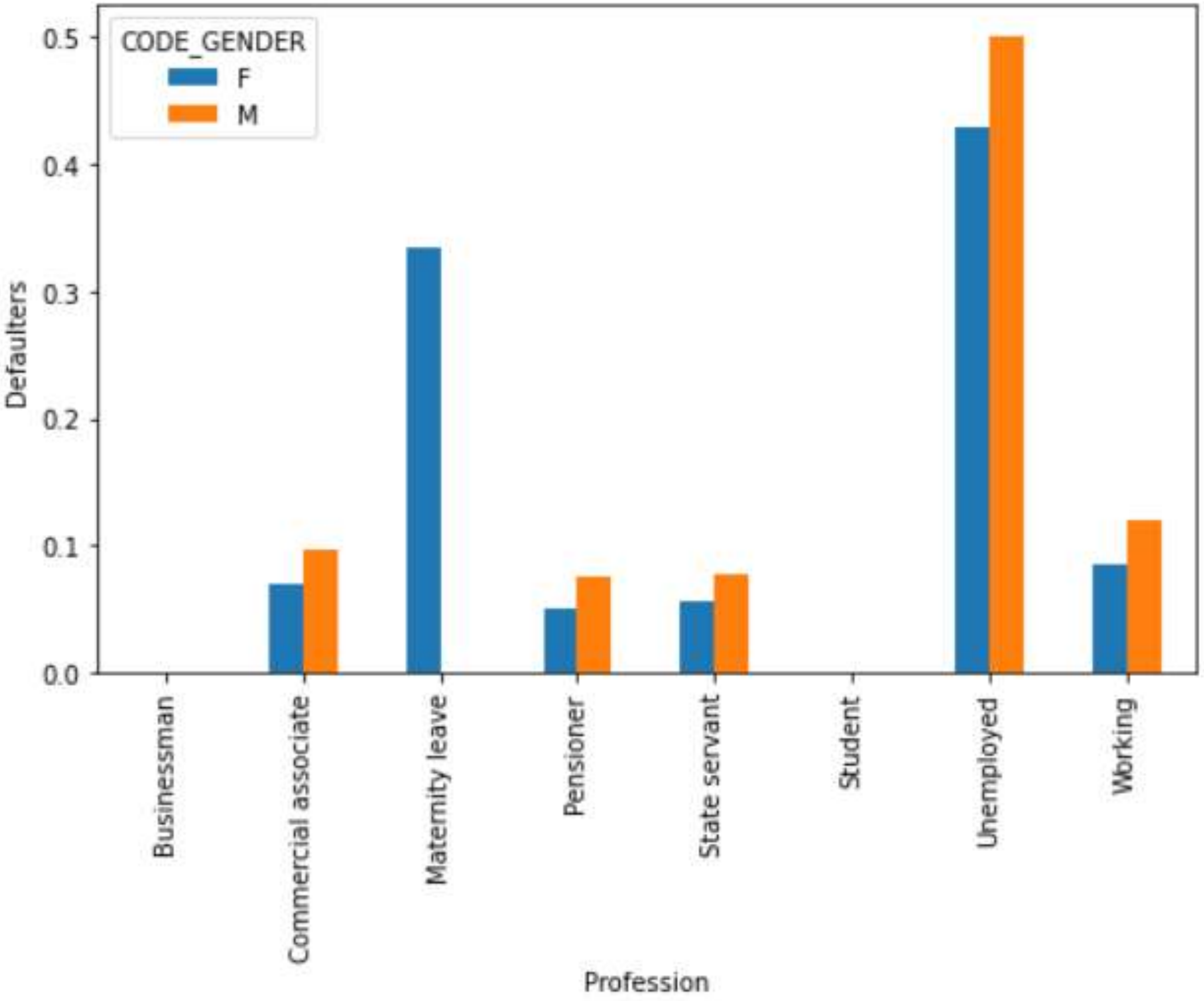
• Recommendations:

- Consider granting a slightly higher amount of loans to clients across all income groups, as this may contribute to lower default rates.
- It is strongly advised to exercise caution when providing medium and low amounts of loans to young clients due to the observed higher risk of defaults.

Educational qualification



Profession



CODE_GENDER
F
M
Defaulters
0.0
0.1
0.2
0.3
0.4
0.5
Businessman
Commercial associate
Maternity leave
Pensioner
State servant
Student
Unemployed
Working
Profession

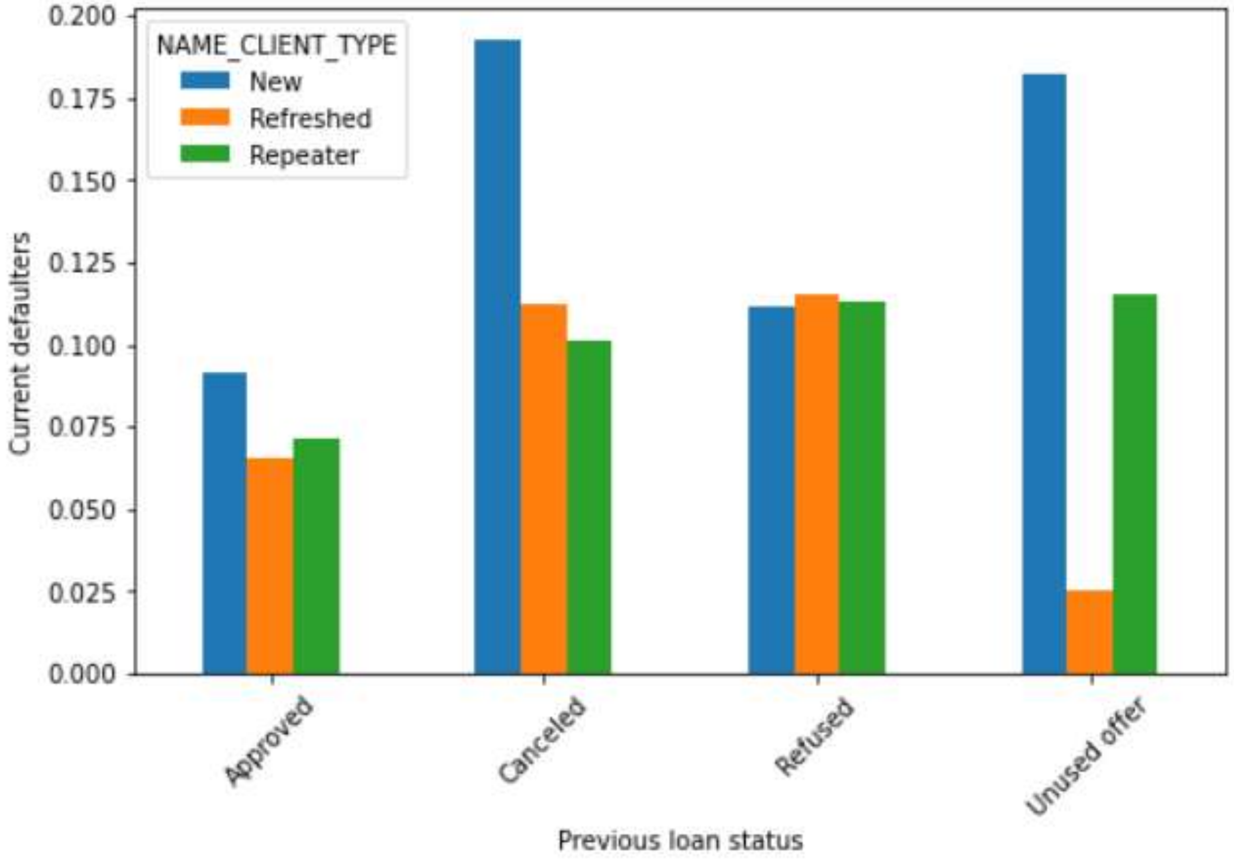
Insights:

- Individuals with higher education levels demonstrate lower default rates, while those with lower secondary education are more likely to default.
- Unemployed clients and those on maternity leave have a higher incidence of loan defaults.

• Recommendations:

- It is generally safe to consider granting loans to clients with higher education across various professions, except in the case of unemployed individuals and women on maternity leave. Caution should be exercised in those specific scenarios.

Previous loan status and client type



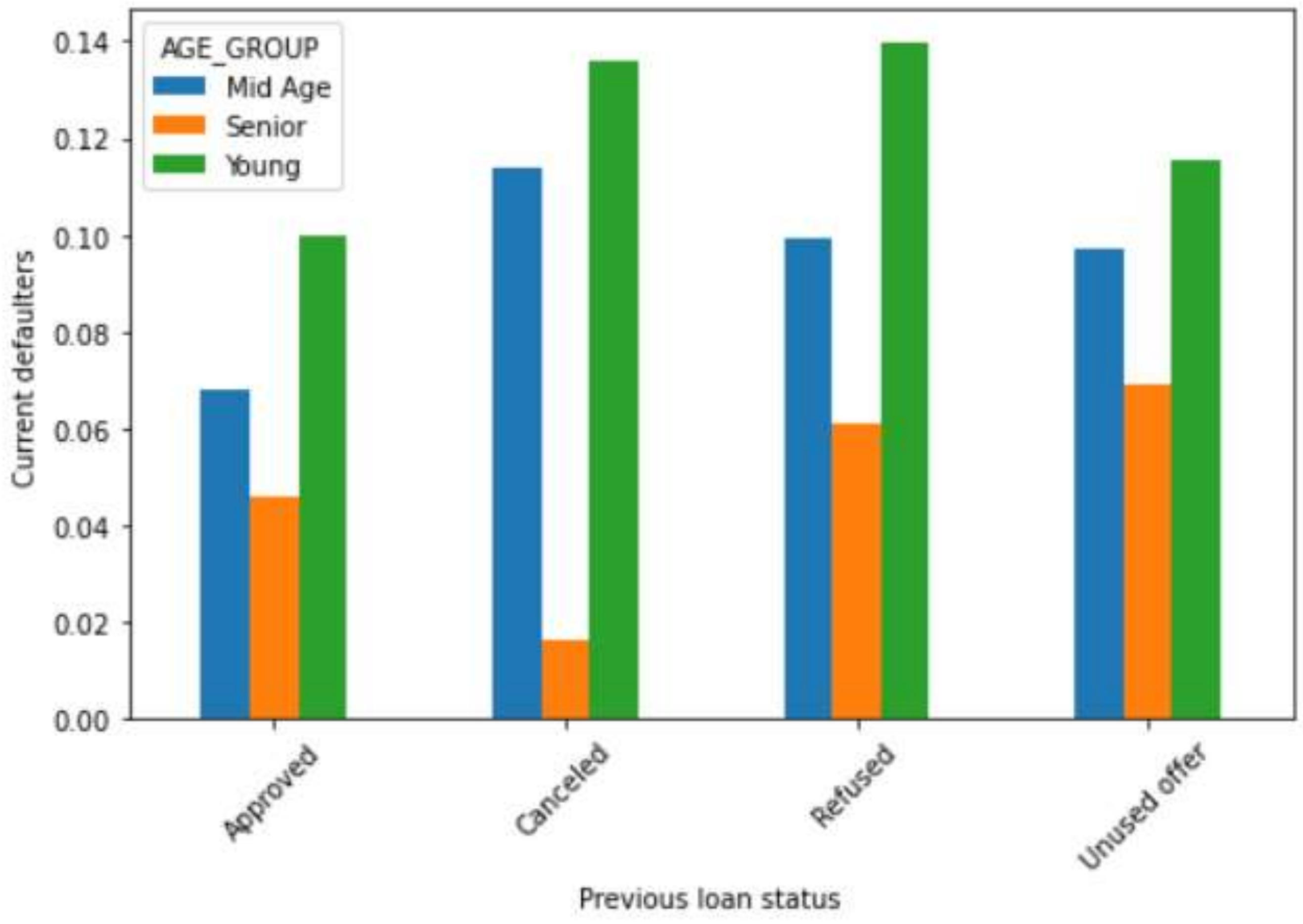
Insights:

- New clients with previously unused offers exhibit higher default rates.

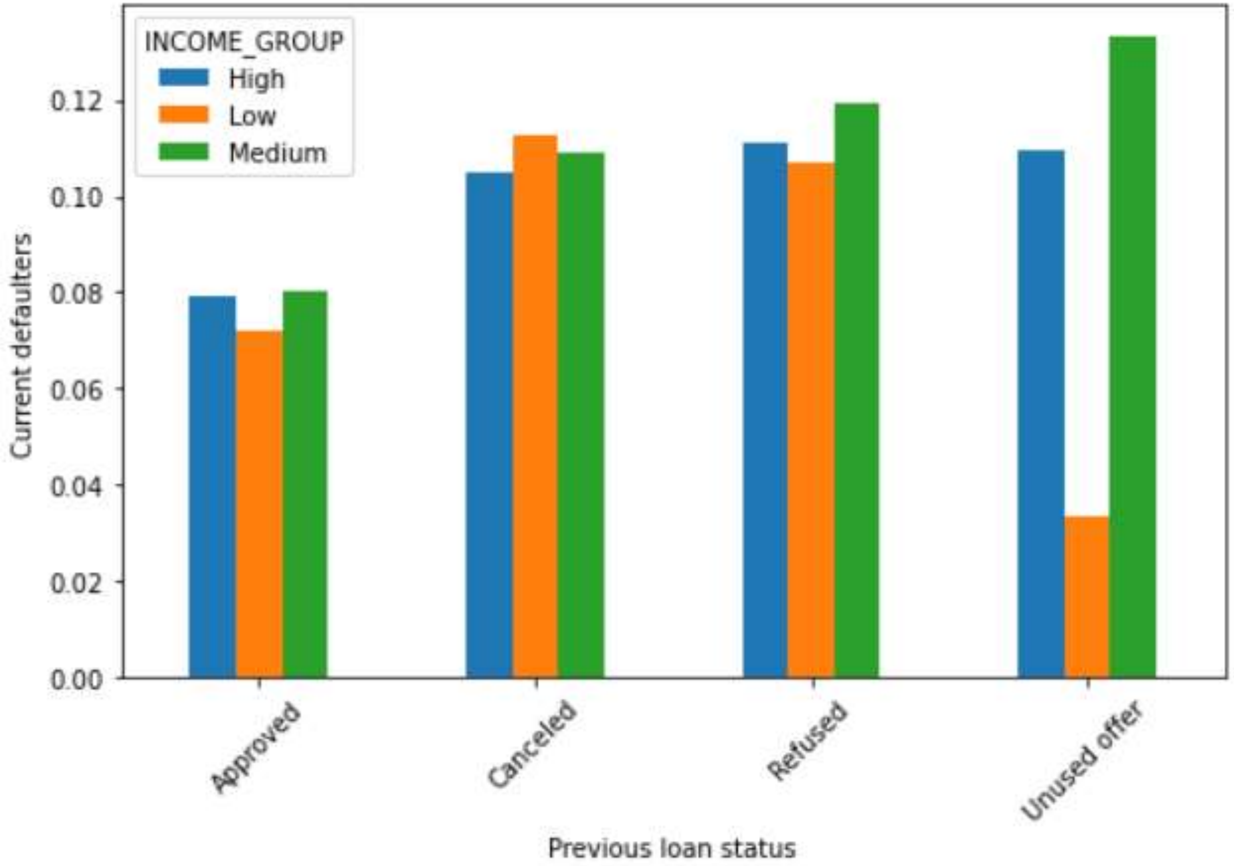
- **Recommendations:**

- There is a risk associated with approving loans for clients whose applications were previously refused or whose offers were left unused. Caution should be exercised in such cases to minimize the likelihood of defaults.

Age group and Previous loan status



Income and previous loan status



Insights:

- Young individuals who were previously refused loans show a higher likelihood of defaults.
- Senior citizens, regardless of their previous loan status, exhibit lower default rates.
- Across all income groups, applicants who were previously refused loans are more likely to default.

• Recommendations:

- It is generally safer to approve loans for senior citizens due to their lower default rates.
- Granting loans to applicants who have been previously approved poses a lower risk across all income groups. Caution should be exercised in the case of applicants with a history of loan refusals, as they have shown a higher likelihood of defaults.

Conclusion

The observed patterns in default rates across various demographic factors provide valuable insights for effective risk management in loan approvals. Higher-income individuals, mid-aged and senior clients, and those with higher education levels demonstrate lower default rates, suggesting a more secure lending profile. Conversely, caution is warranted when considering loans for younger individuals in lower income groups, those with lower education levels, and applicants with a history of refusals or unused offers.

Tailoring lending practices based on these observations can lead to more informed decisions, minimizing default risks and contributing to a robust and sustainable lending portfolio. Continuous monitoring and analysis of applicant profiles remain crucial for adapting strategies to evolving trends in loan defaults.