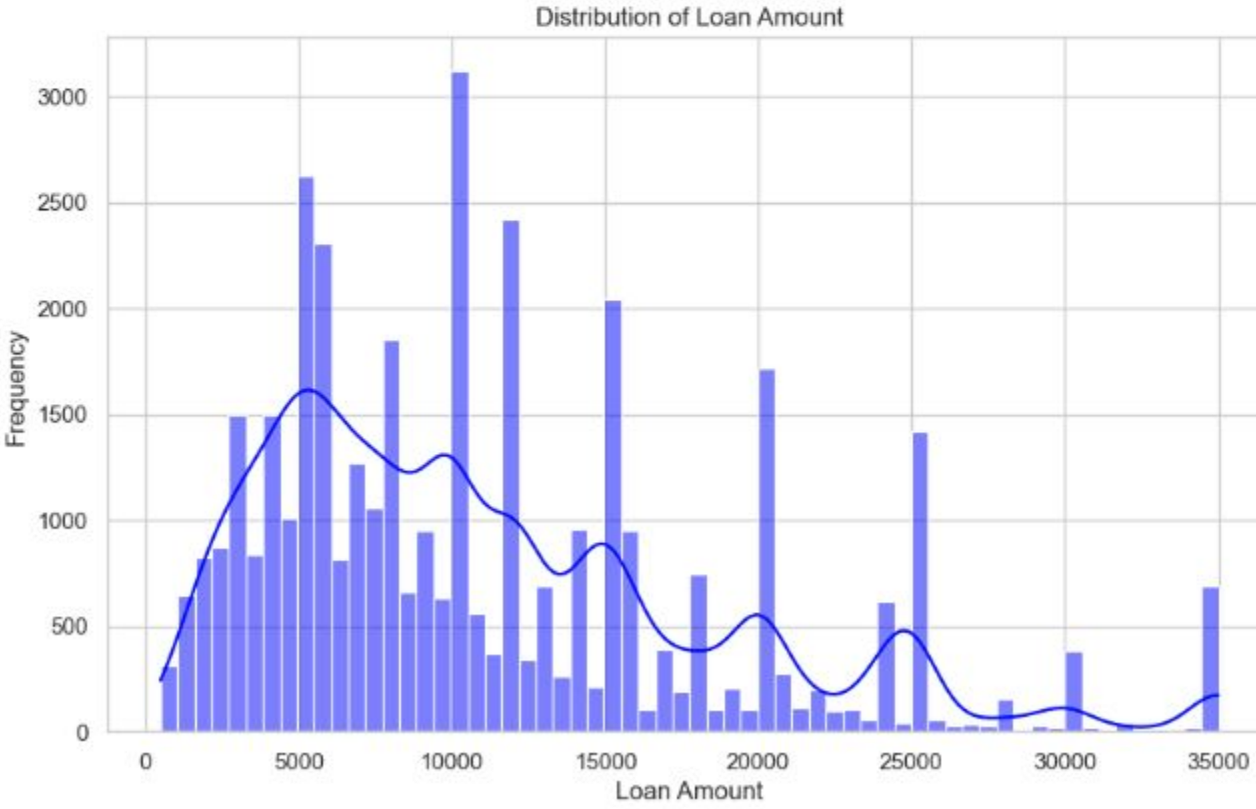
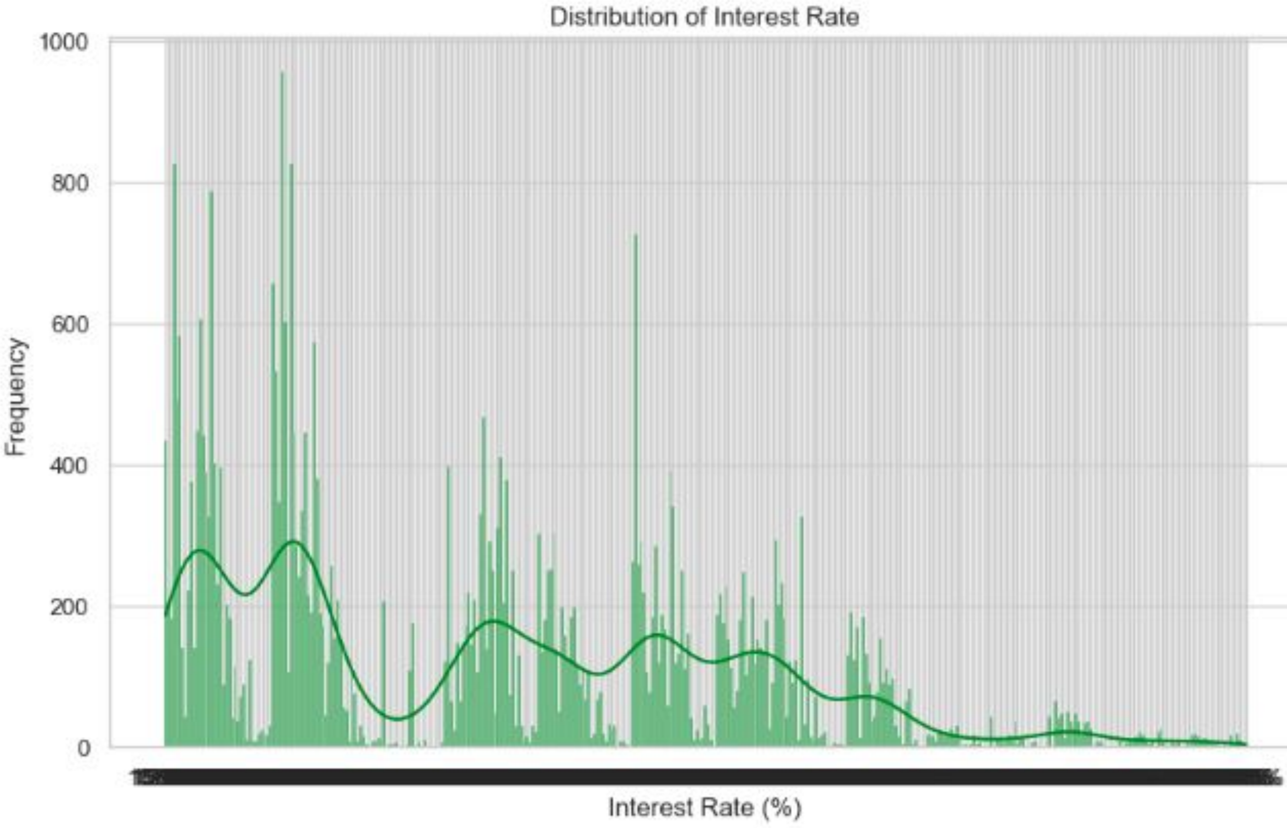
Lending Club Case Study

Analysis of risks of customer finance company

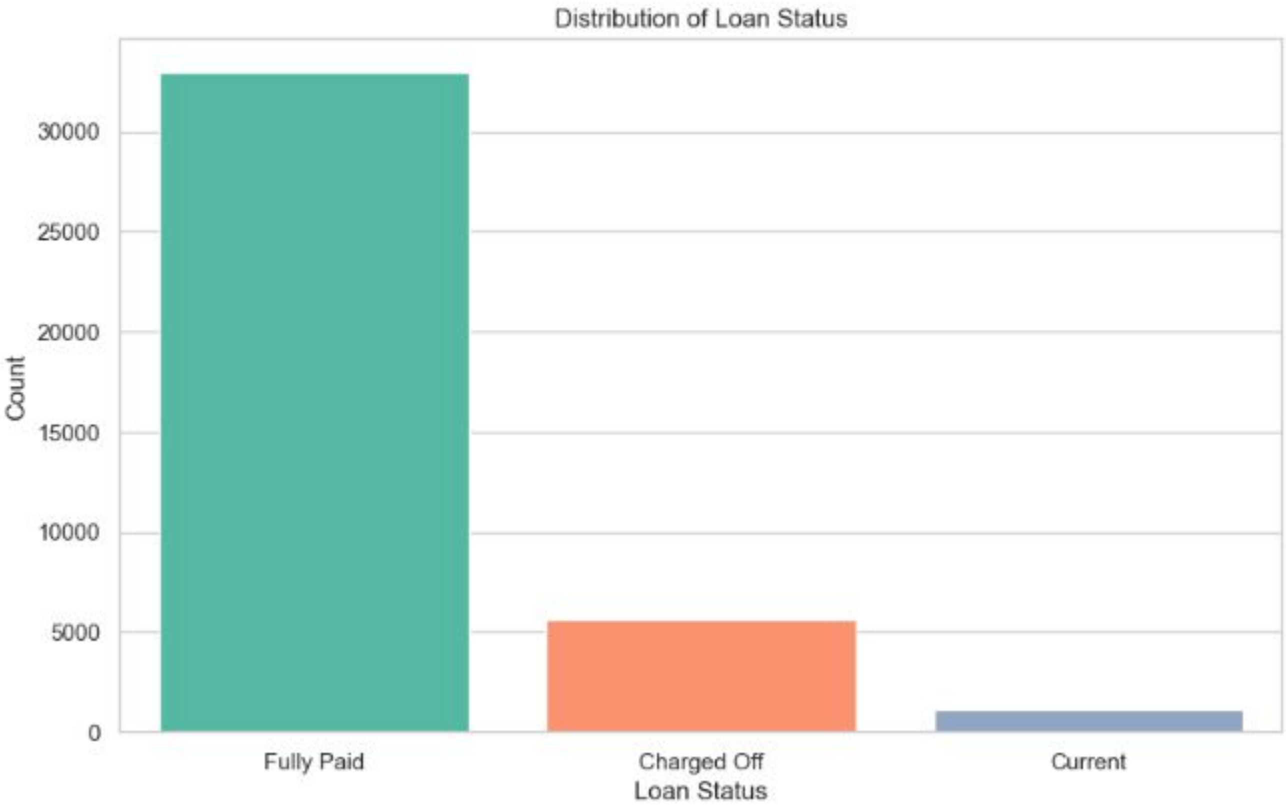
Univariate Analysis



Most loans are within the $5,000 to $15,000 range, with fewer high-value loans

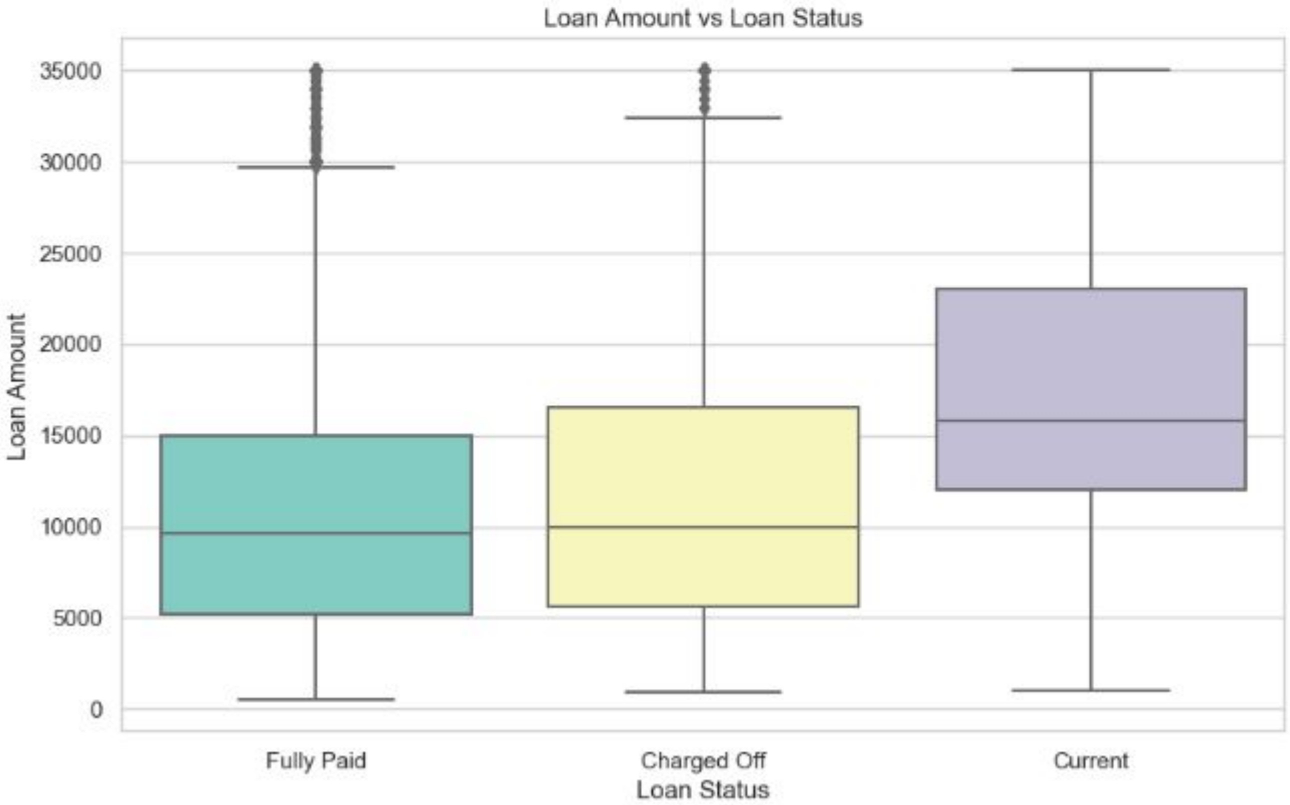


Interest rates are generally between 10% and 15%, with a peak around 13%. Higher interest rates may indicate higher-risk borrowers.

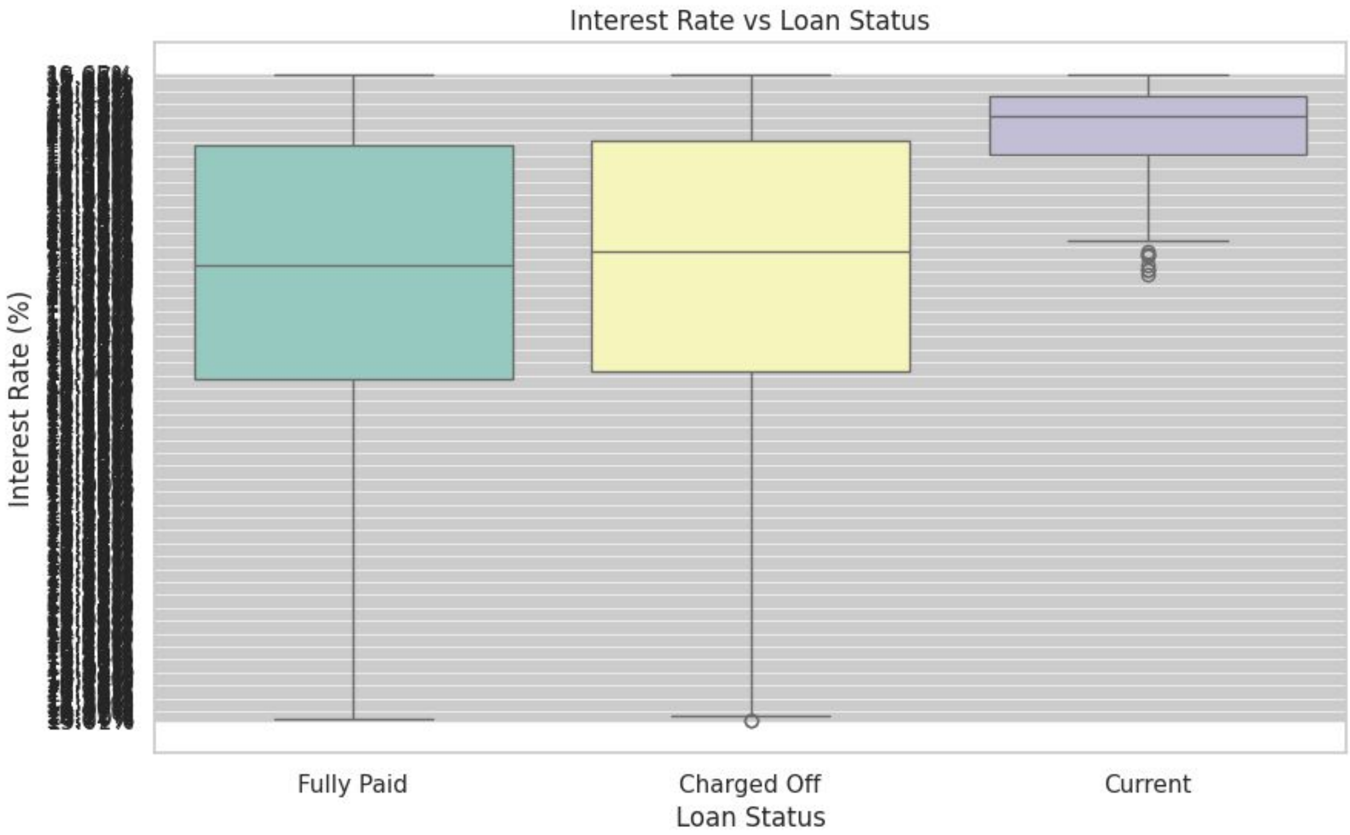


The majority of loans are either fully paid or current, with a smaller but significant number of charged-off (defaulted) loans.

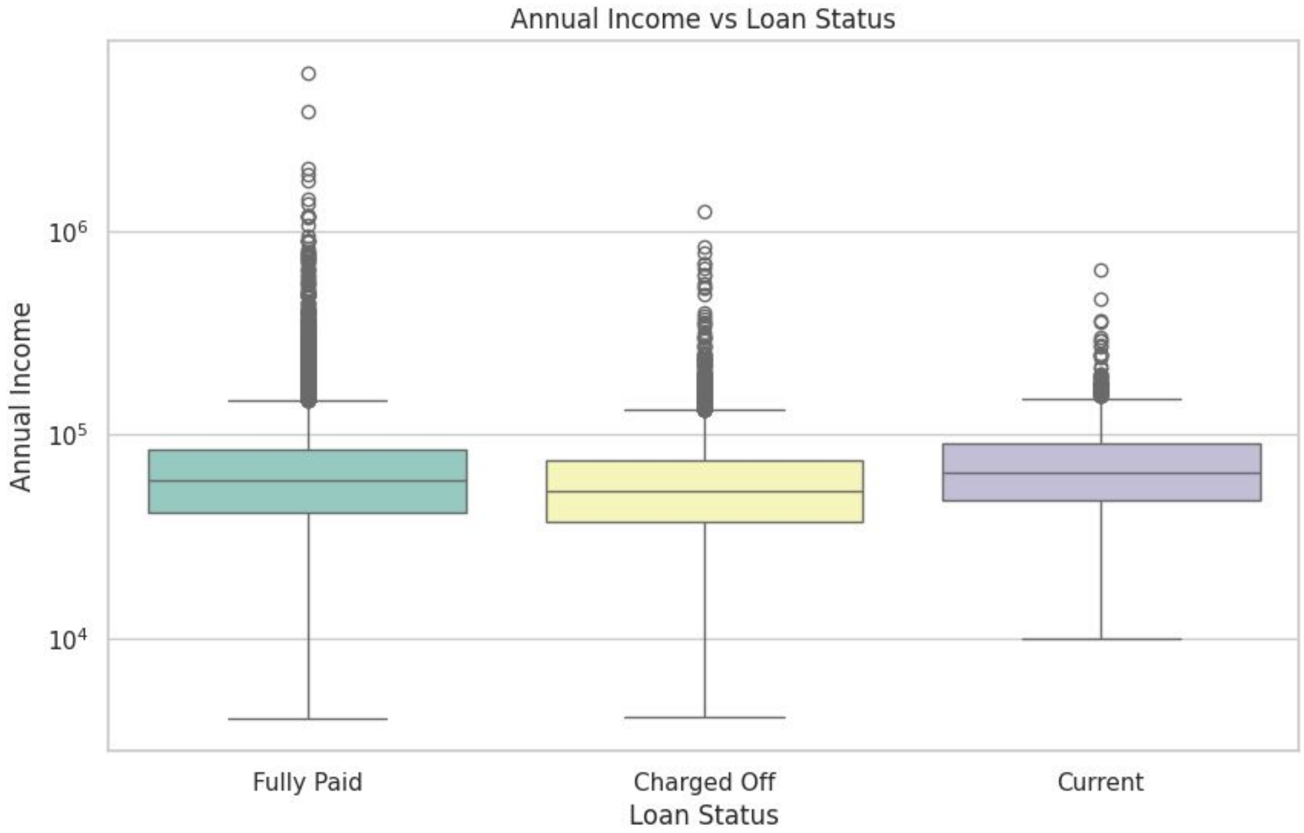
Bivariate Analysis



Higher loan amounts tend to have a higher risk of being charged off (defaulted).

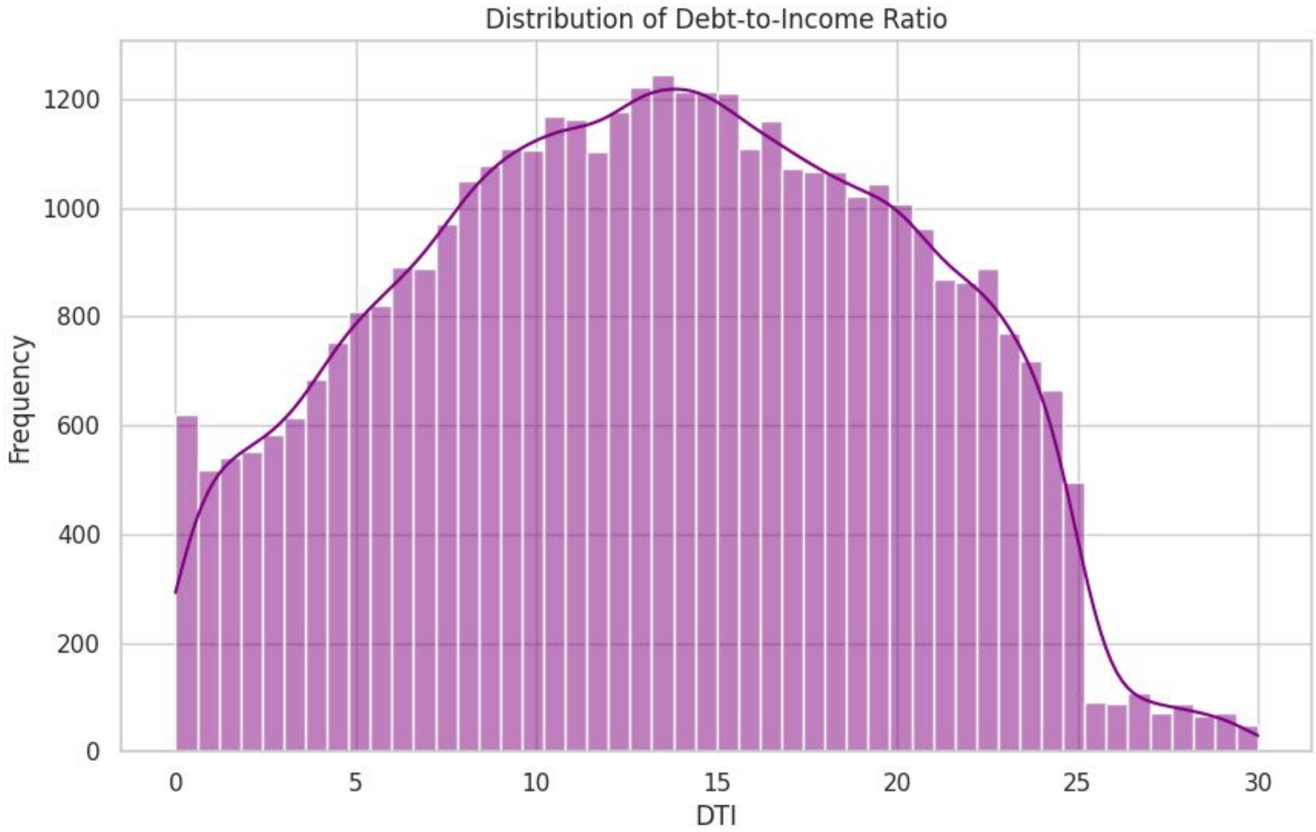


Charged-off loans generally have higher interest rates, indicating that higher-risk borrowers are charged more

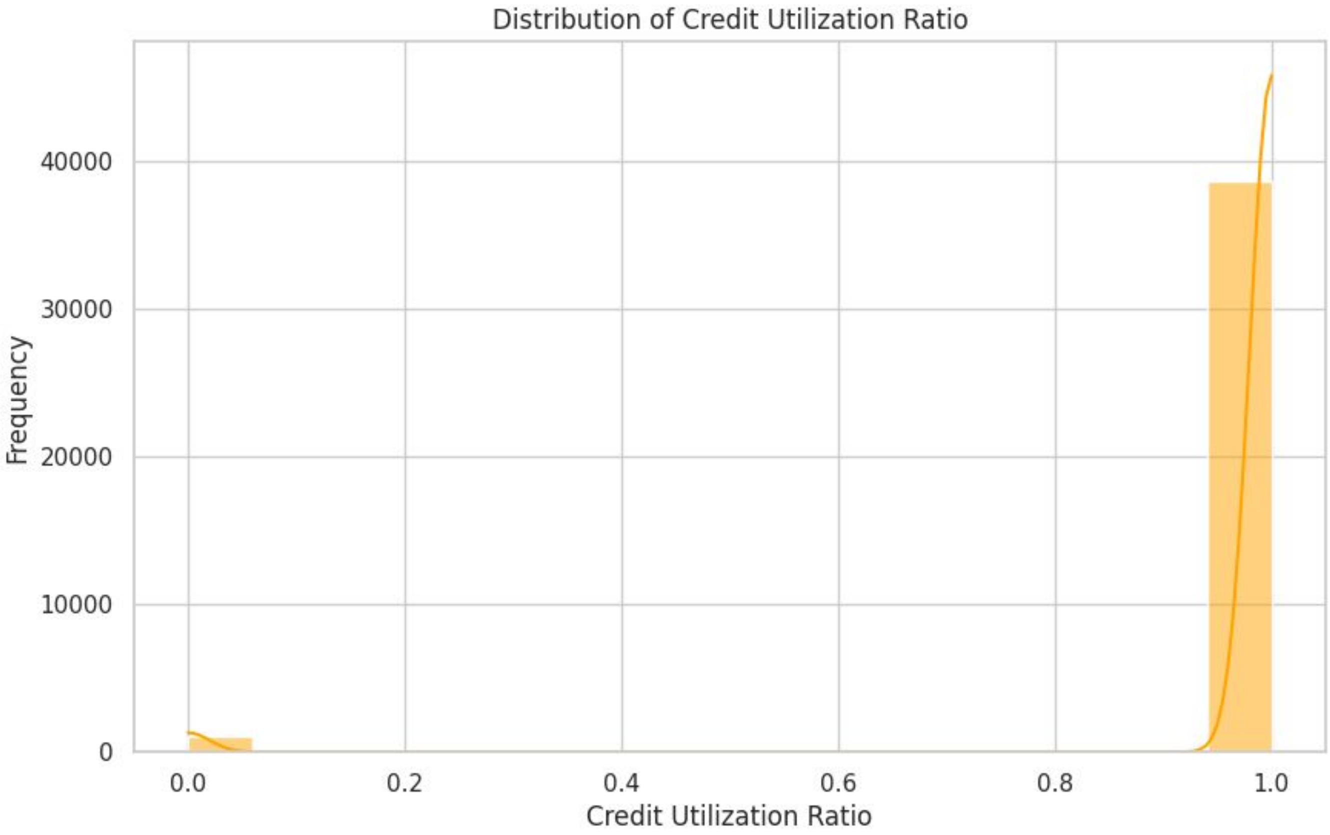


There is a wide range of incomes across all loan statuses, but defaults do not show a clear pattern with income.

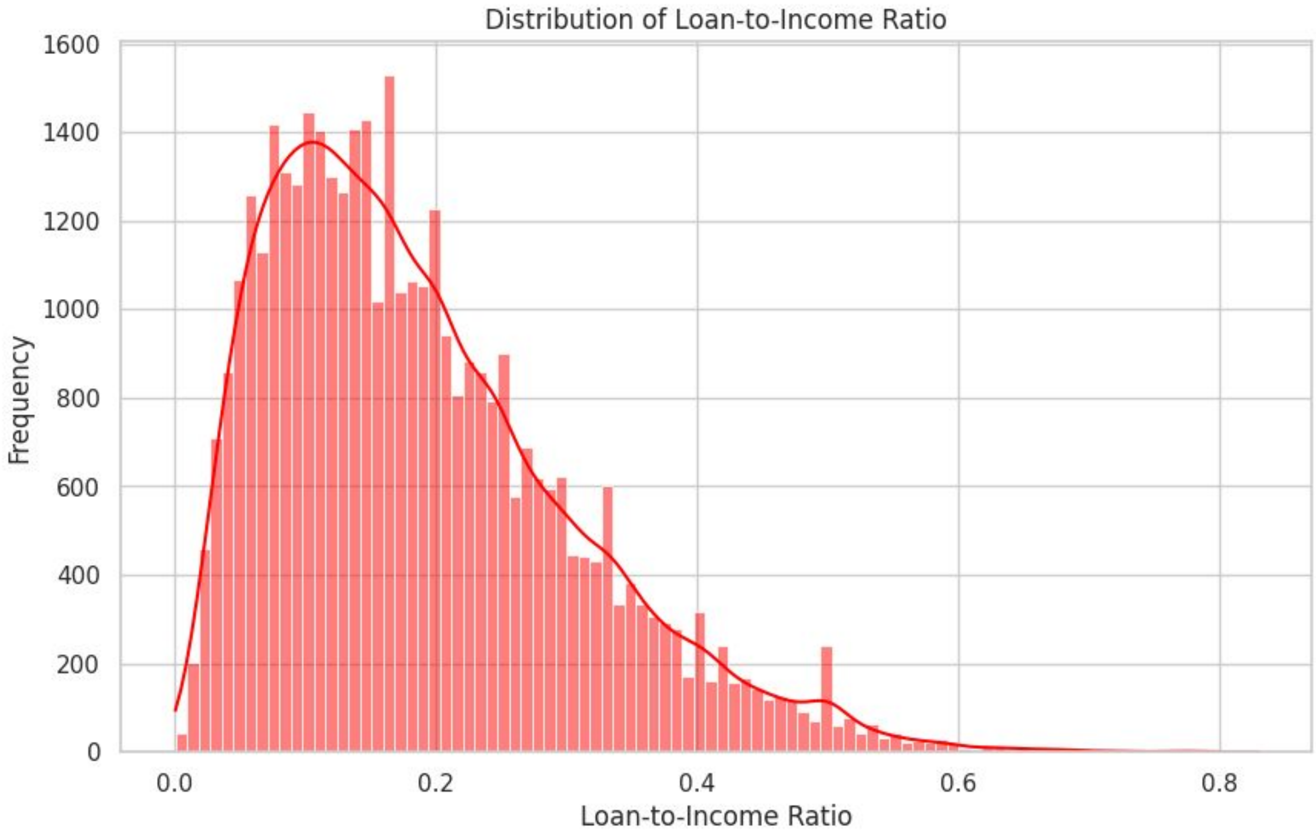
Univariate Analysis of Derived Metrics



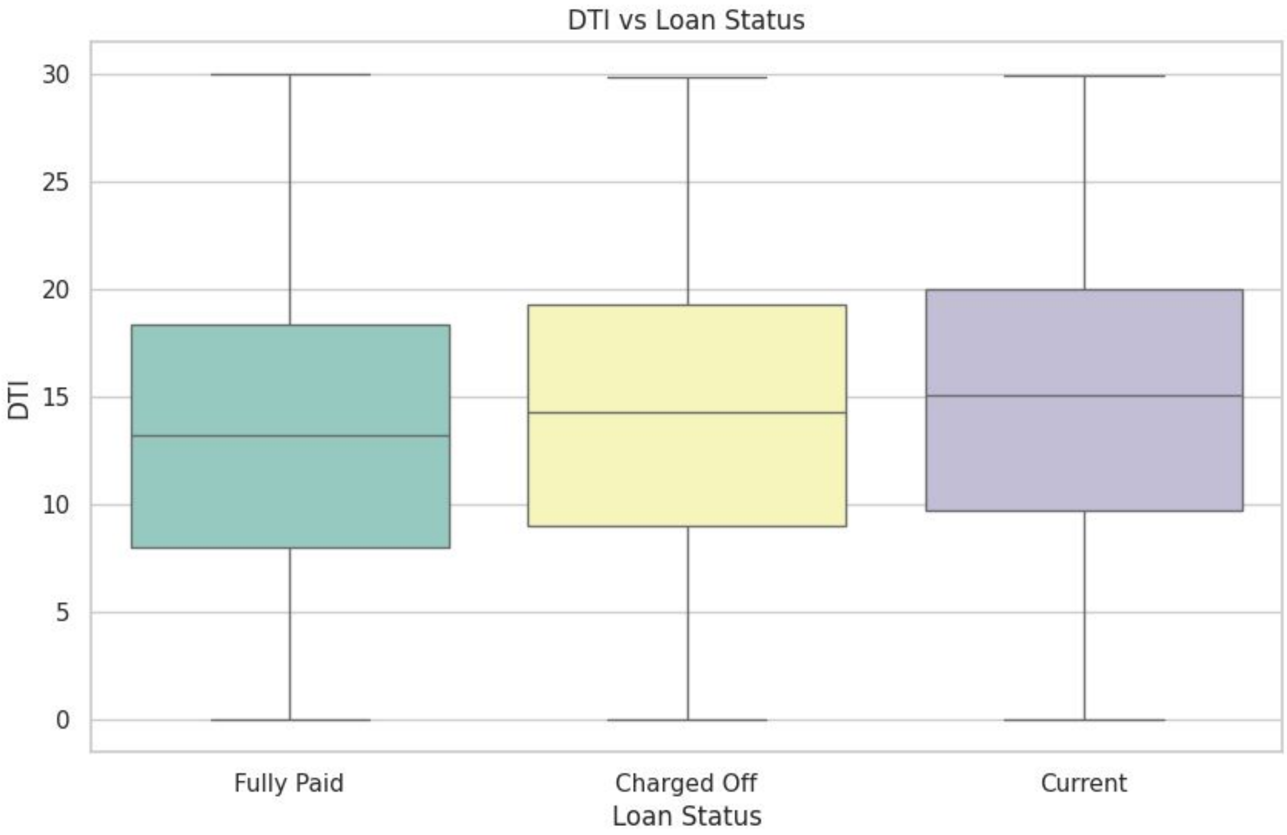
The Debt-to-Income Ratio is skewed, with most borrowers having a lower DTI, indicating they are not over-leveraged.



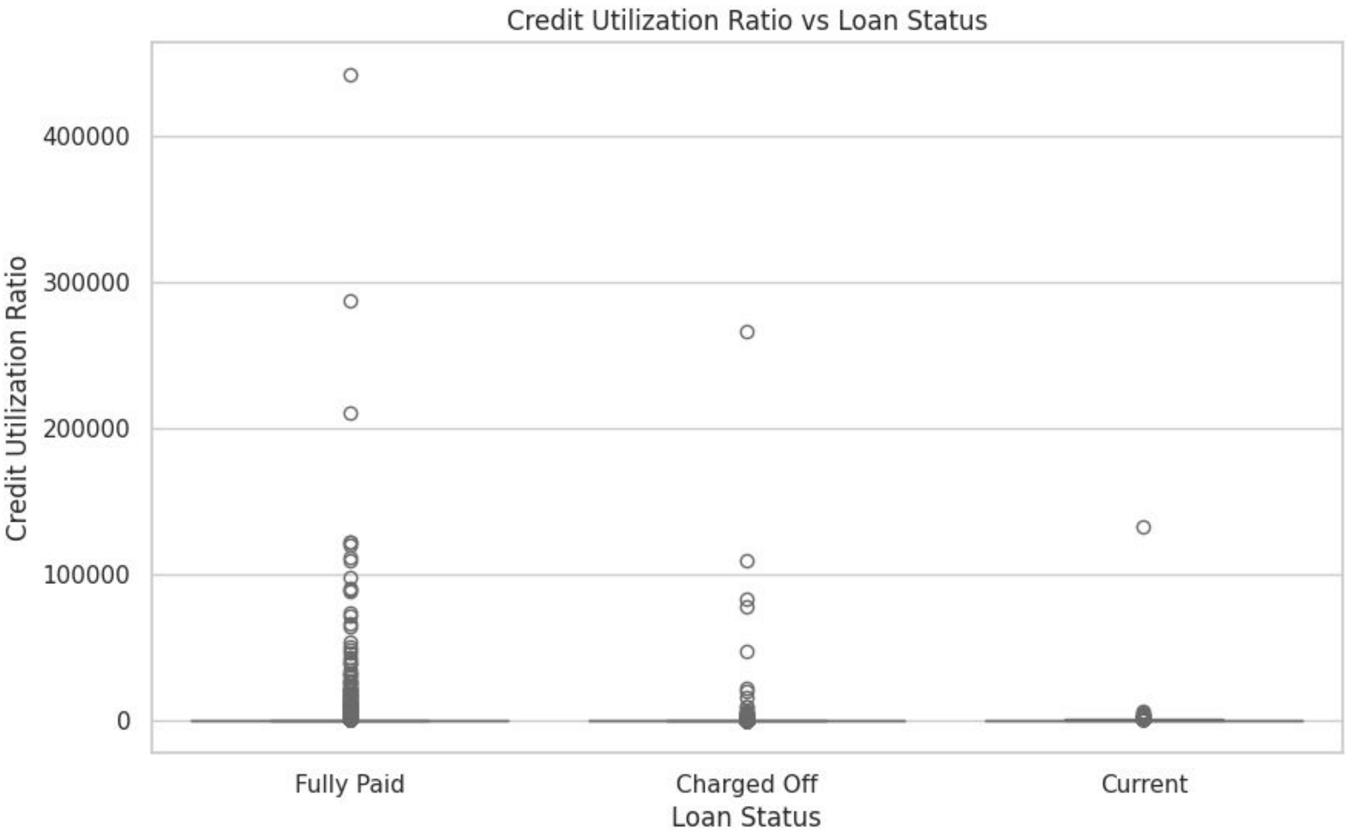
The Credit Utilization Ratio varies widely, suggesting different levels of credit use among borrowers.



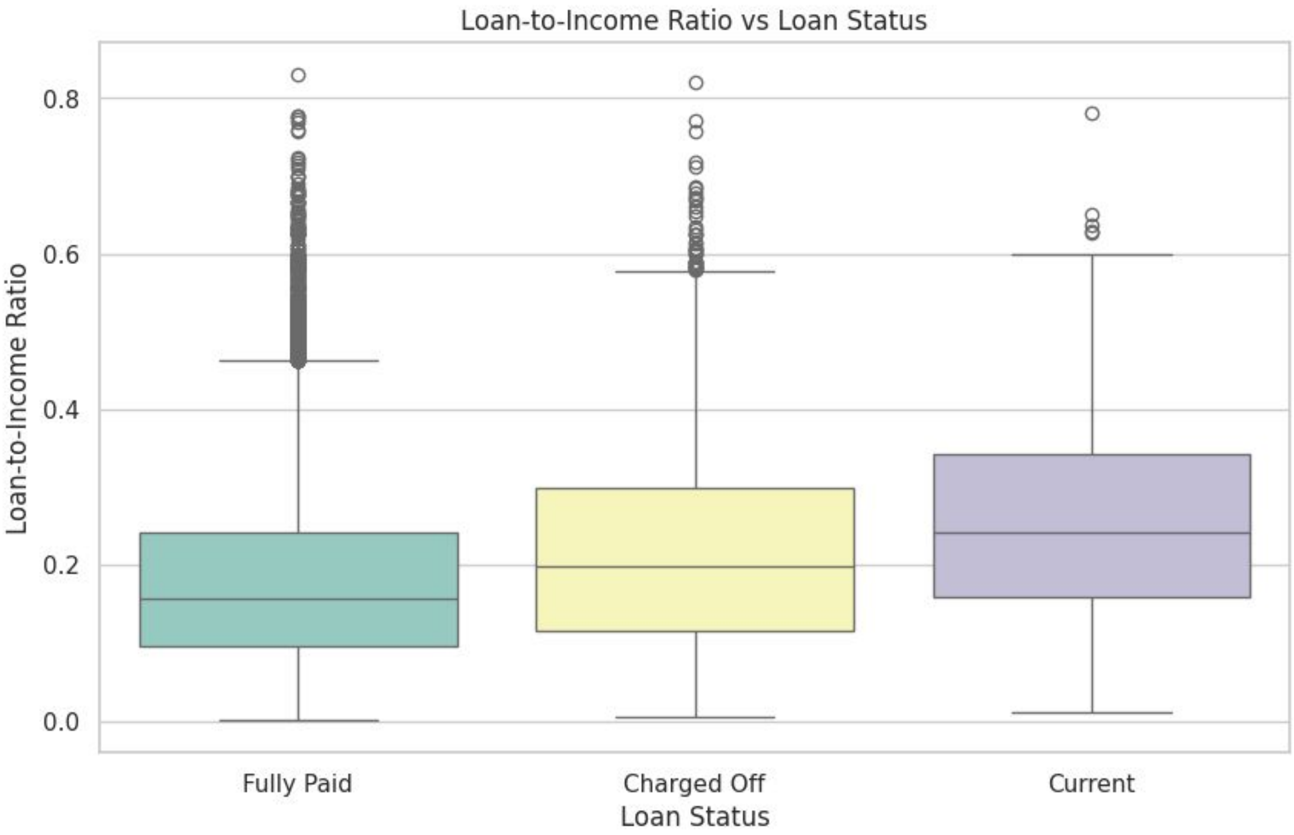
This ratio is mostly low, but some borrowers have taken loans that are significant relative to their income.



Borrowers with higher Debt-to-Income Ratios are more likely to default, as indicated by the charged-off loans.

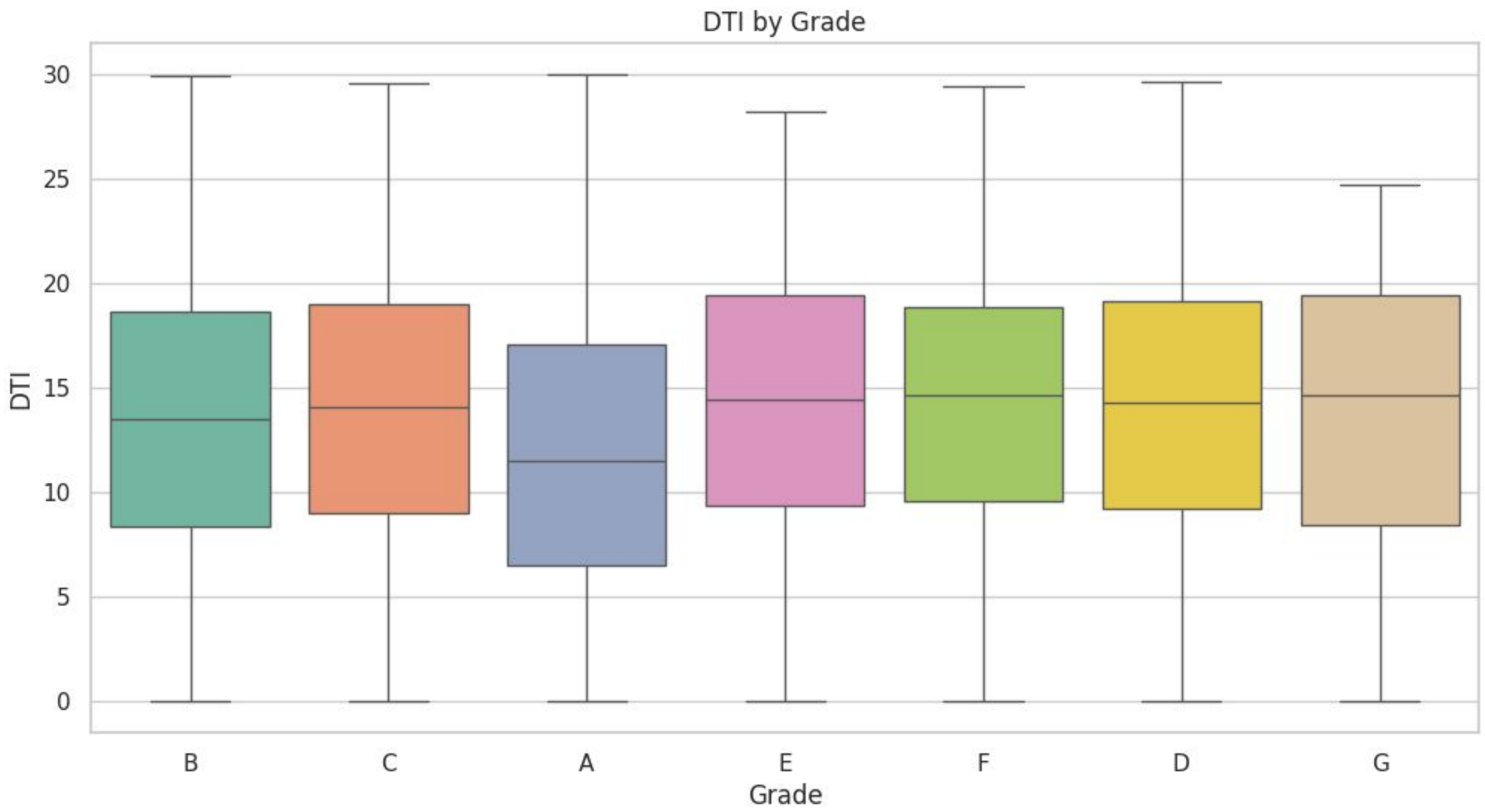


Higher credit utilization correlates with an increased likelihood of default, suggesting that over-leveraged borrowers are at higher risk.

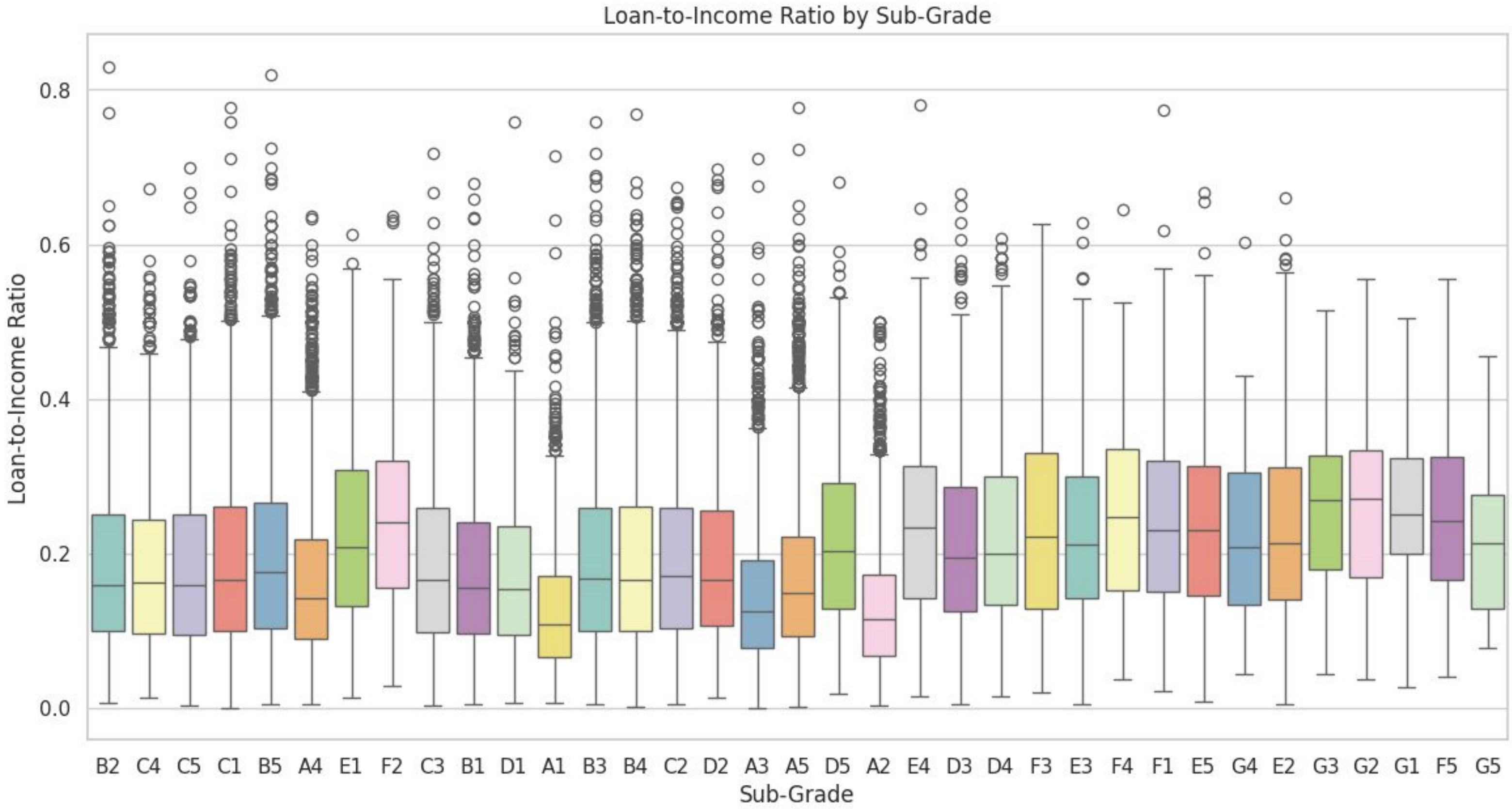


Loans that represent a significant portion of the borrower's income are more likely to be charged off, indicating that such borrowers might struggle with repayments.

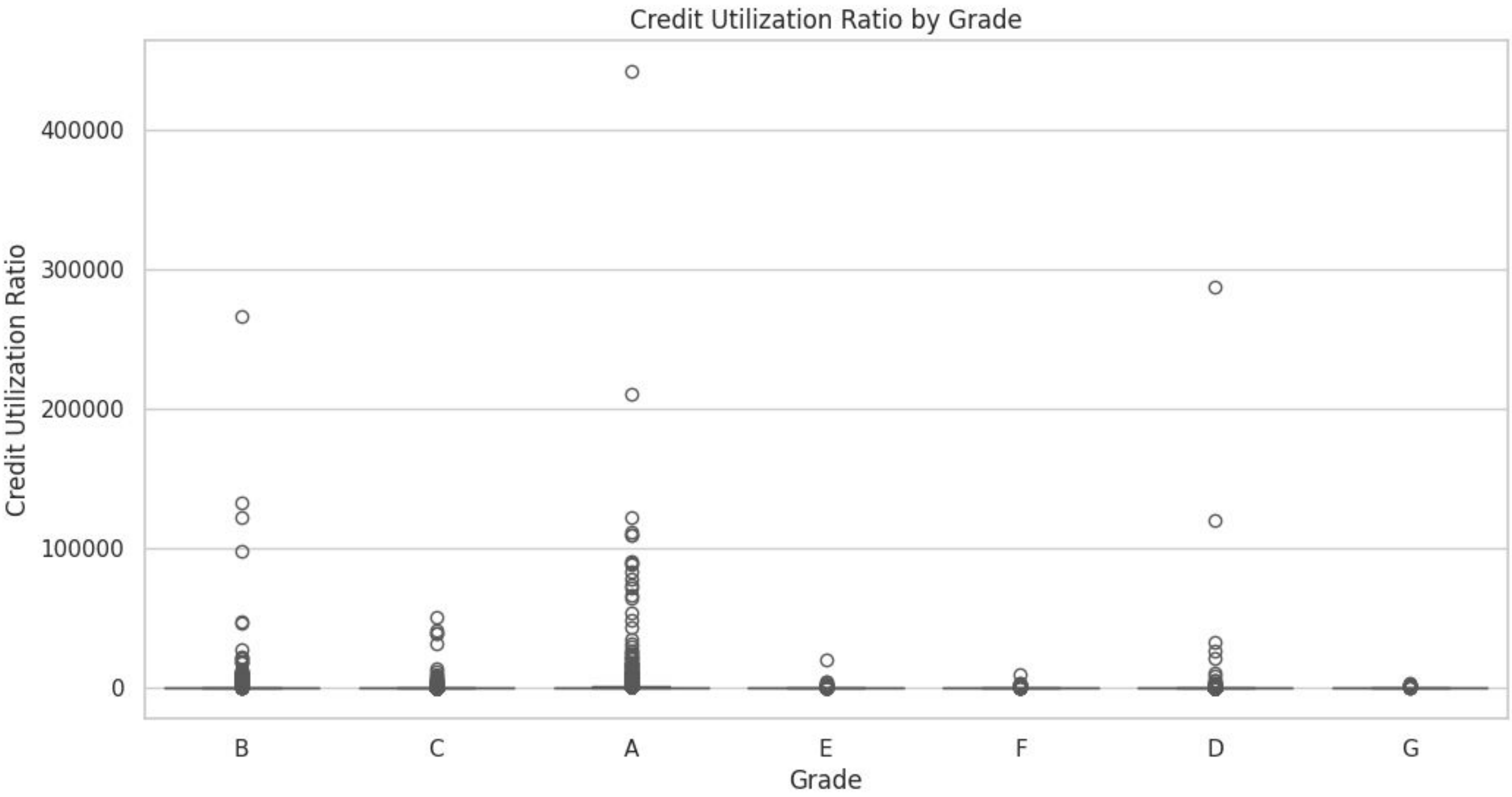
Segmented Analysis of Derived Metrics



Higher loan grades (A, B) generally have lower Debt-to-Income Ratios, indicating that higher-grade borrowers are less over-leveraged.



Within each grade, sub-grades with lower risk (e.g., A1, B1) tend to have lower loan-to-income ratios, indicating more conservative borrowing



Higher-grade borrowers tend to have lower credit utilization ratios, suggesting better credit management

Final Conclusions

1. Loan Amount and Interest Rate: Higher loan amounts and interest rates are associated with an increased risk of loan defaults. These factors should be carefully considered when approving loans.

2. Derived Metrics: Metrics like Debt-to-Income Ratio, Credit Utilization Ratio, and Loan-to-Income Ratio provide deeper insights into the financial health of borrowers. High values in these metrics are strong indicators of potential default risk.

3. Segmented Analysis: Borrowers with higher credit grades (A, B) generally manage their debts better, with lower DTI, credit utilization, and loan-to-income ratios. These segments are less likely to default compared to lower-grade borrowers.

4. Risk Management: The company should use these insights to refine its lending criteria, focusing on borrowers with lower derived metric values and higher grades to minimize default risks.

Thank You