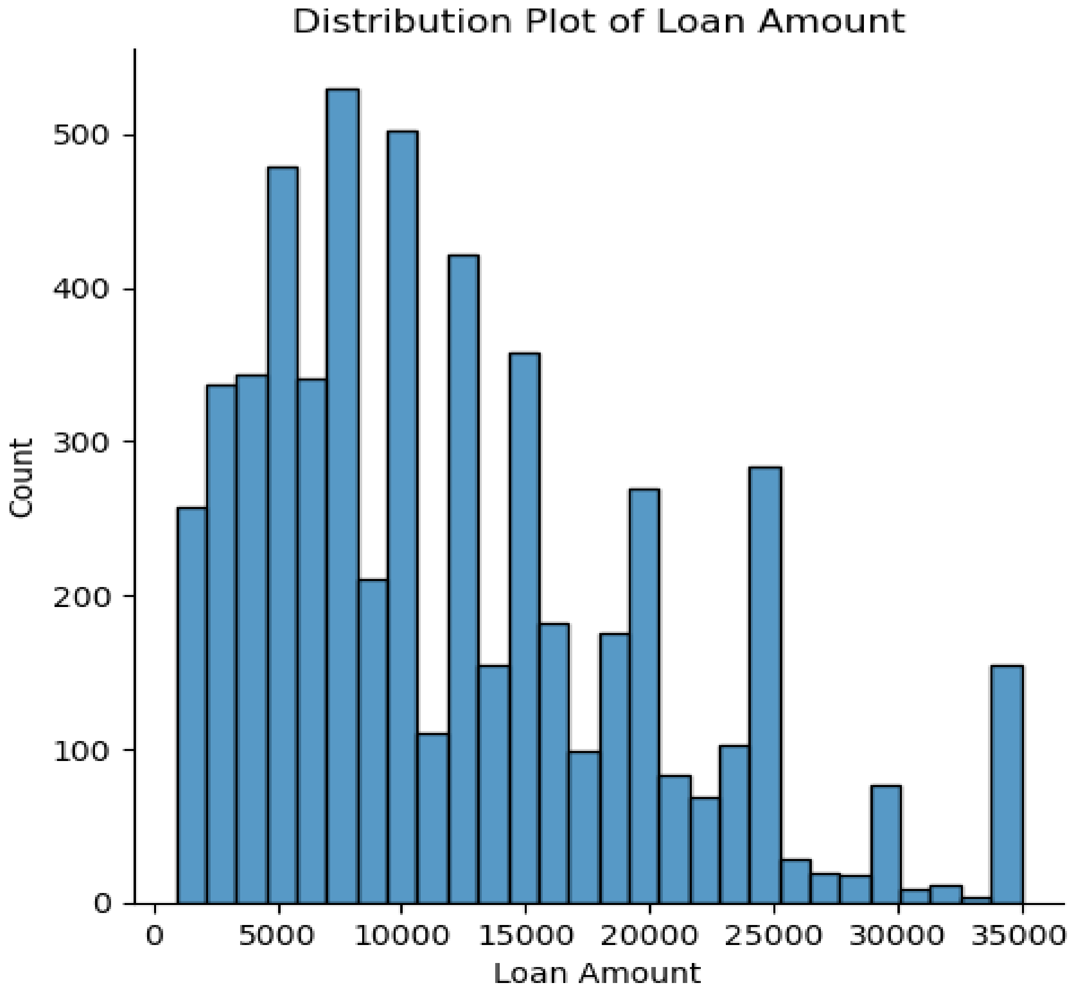
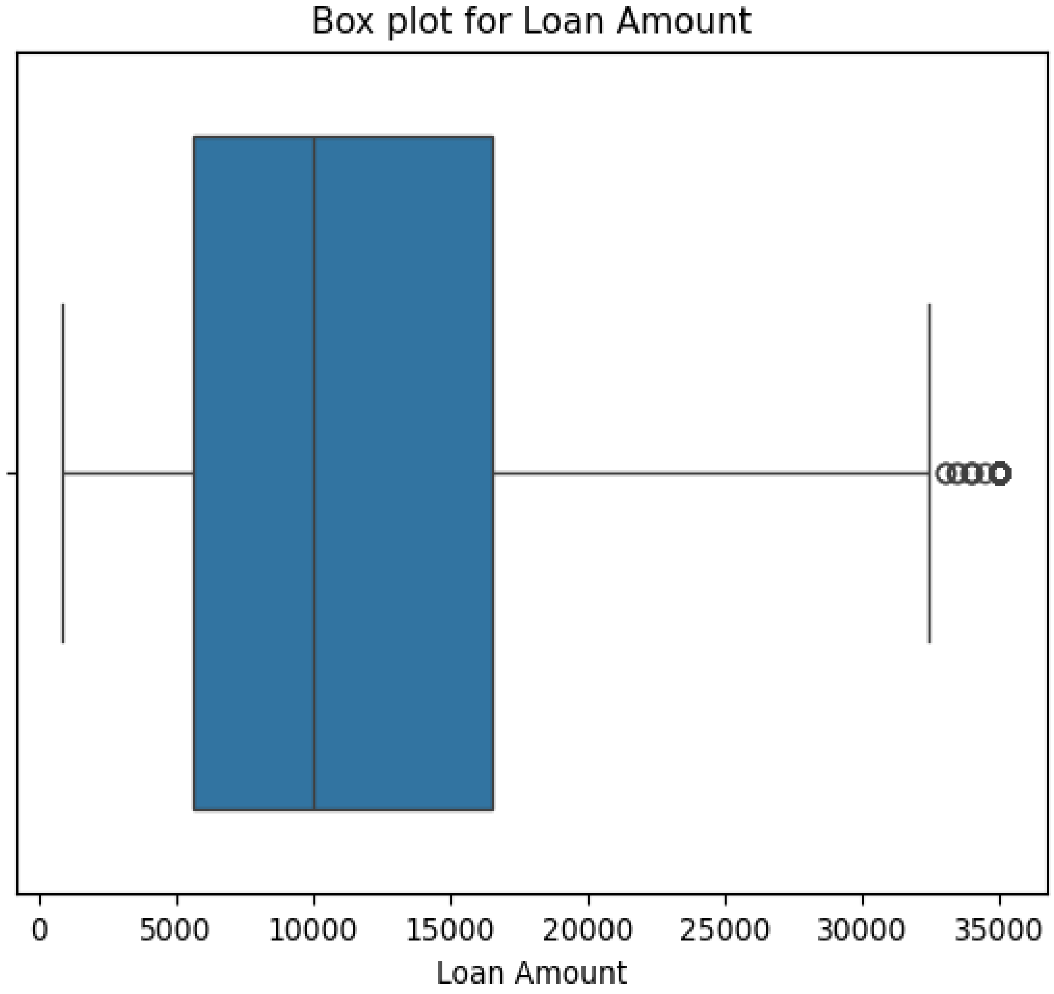
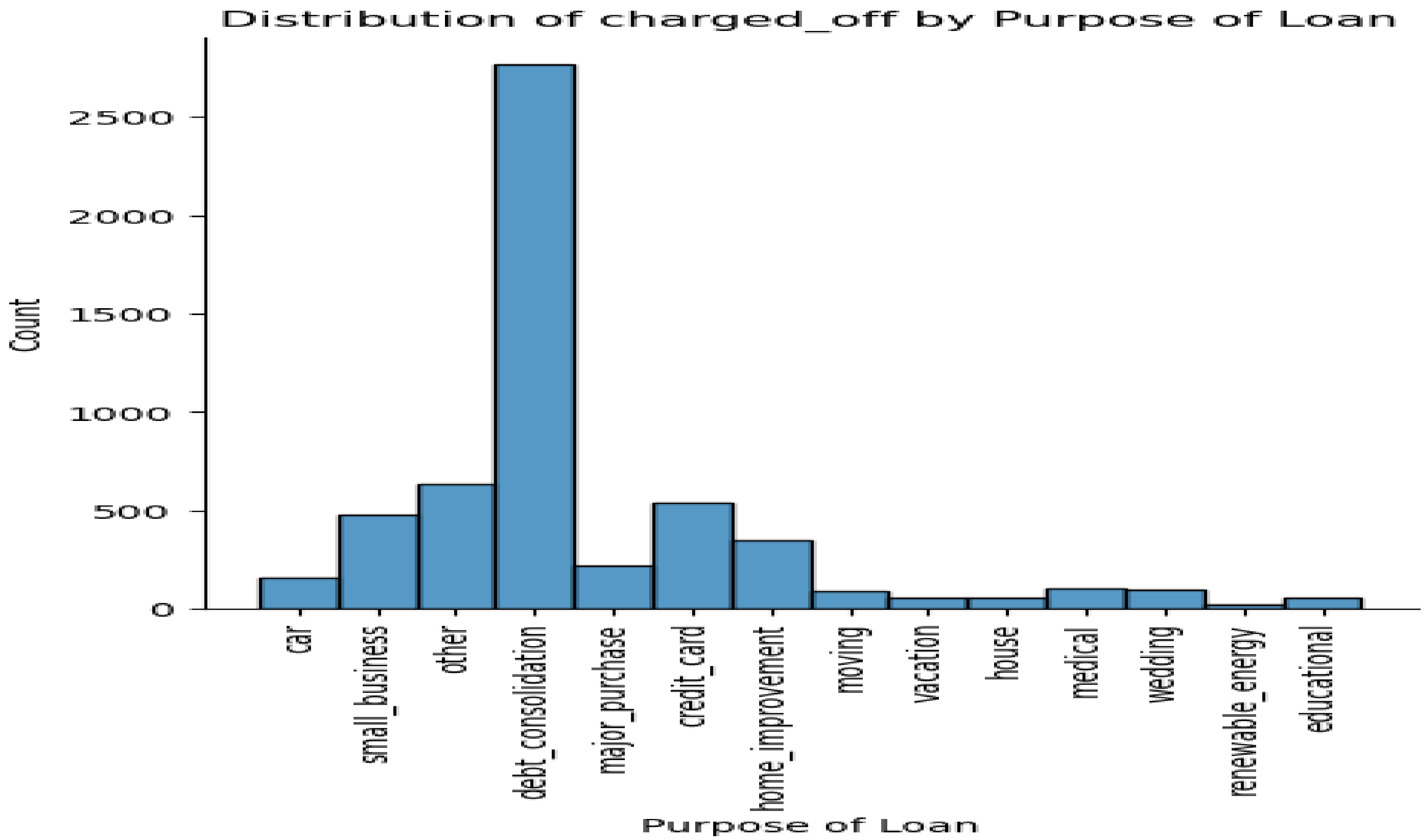
Distribution and Box Plot of Loan Amount for charged off accounts





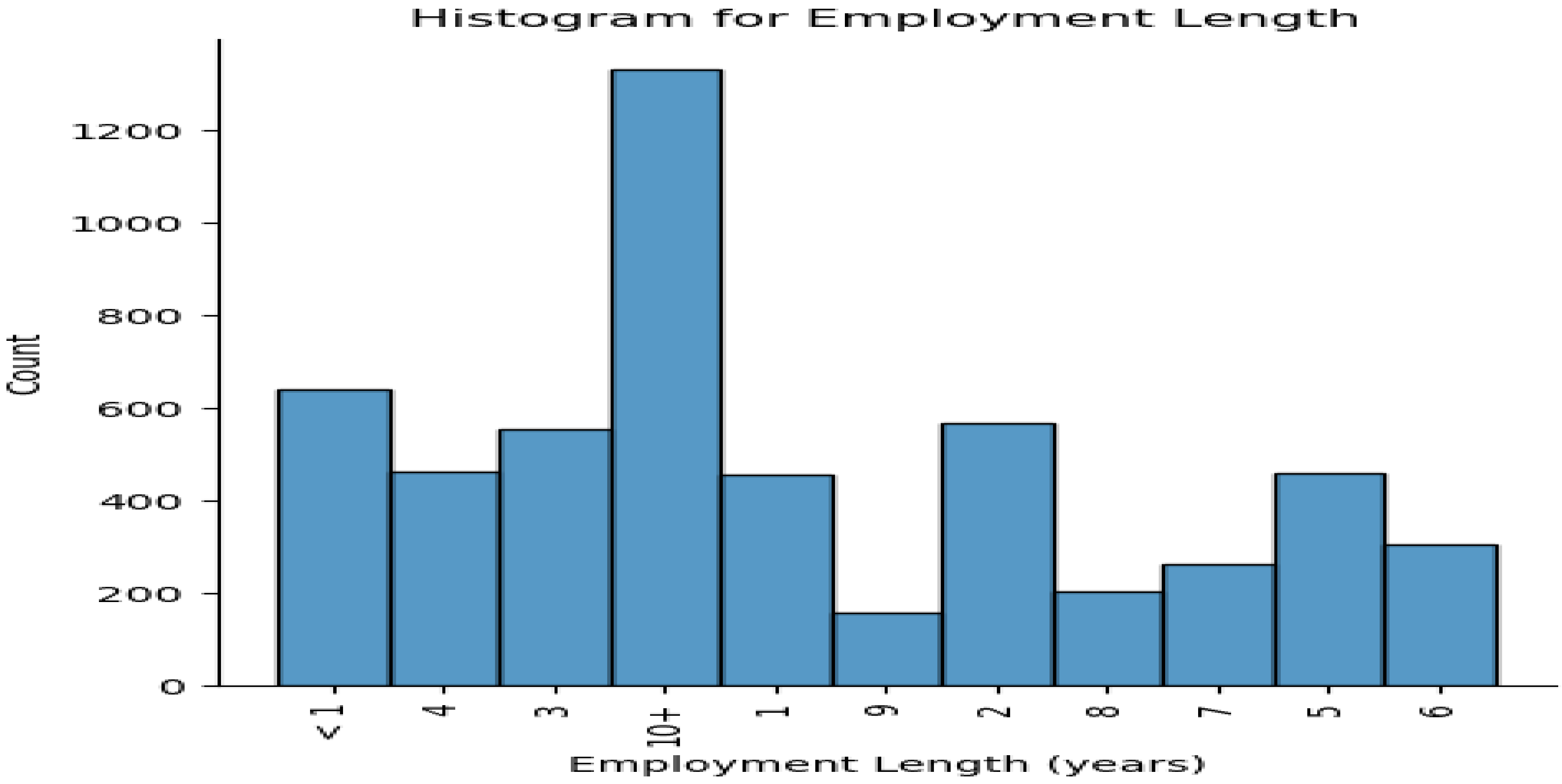
Observation: Among charged off accounts, majority of loans were from 3,000 to 20,000 and there were some outliers (approx. 200 out of 5,627) who had loan amount over 32,000.

Distribution of Loan Purpose for charged off accounts



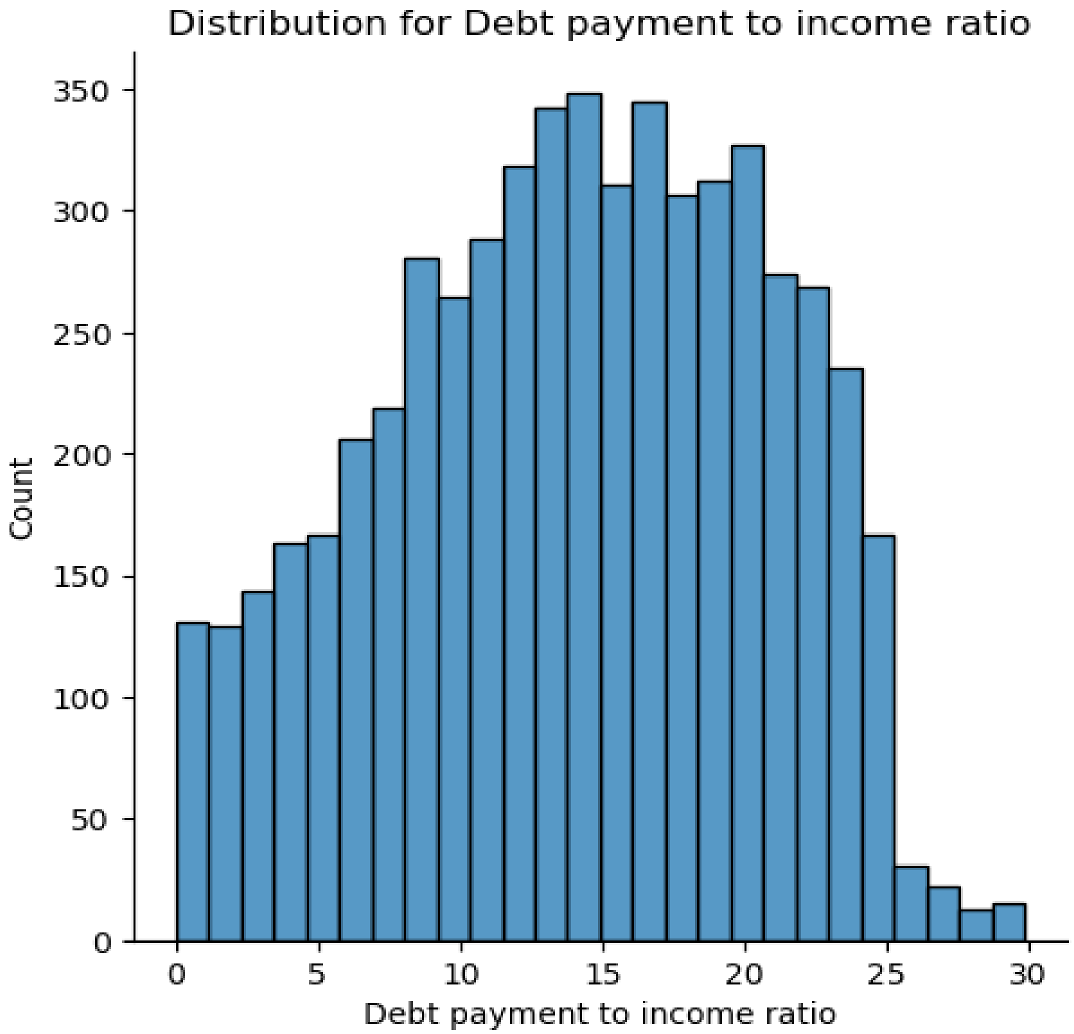
Observation: Among charged off accounts, the most frequent purposes for taking loan were Debt consolidation, credit card, small business, and other which accounted for approx. 80% of all.

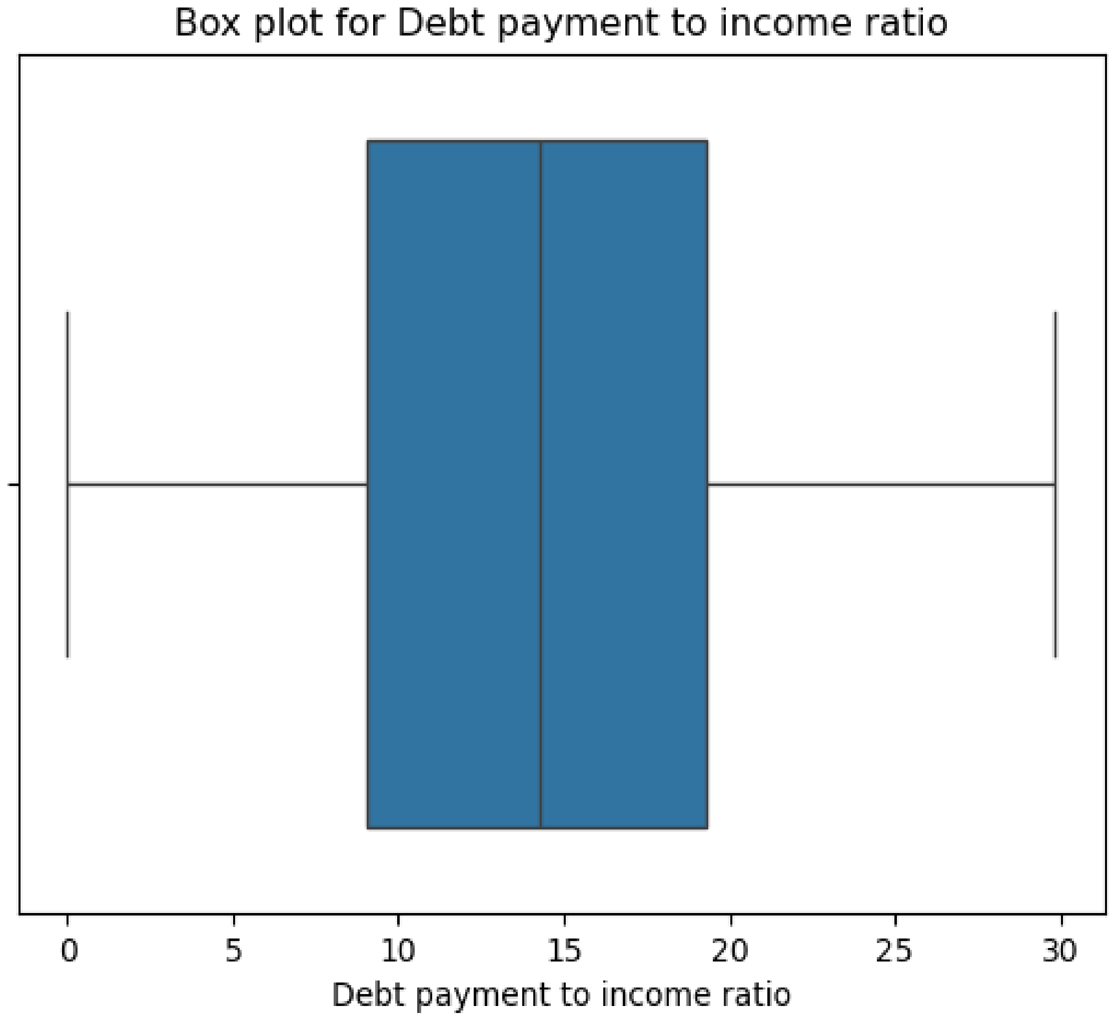
Distribution of Employment length for charged off accounts



Observation: Among charged off accounts, people with 10+ years are the single largest group, and along with low experienced (<1, 1, 2 and 3 years) make up for approx. 65% of charged off accounts.

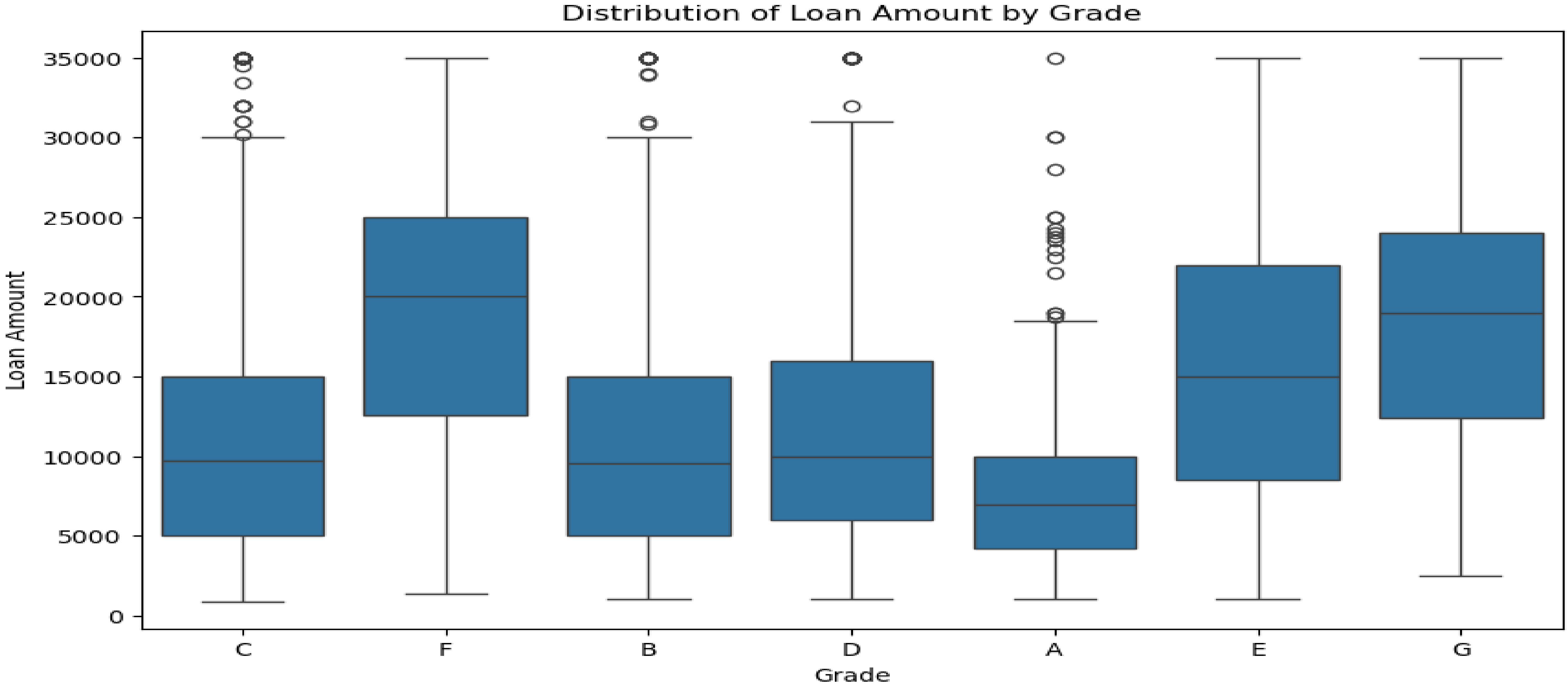
Distribution of Debt payment to Income ratio for charged off accounts





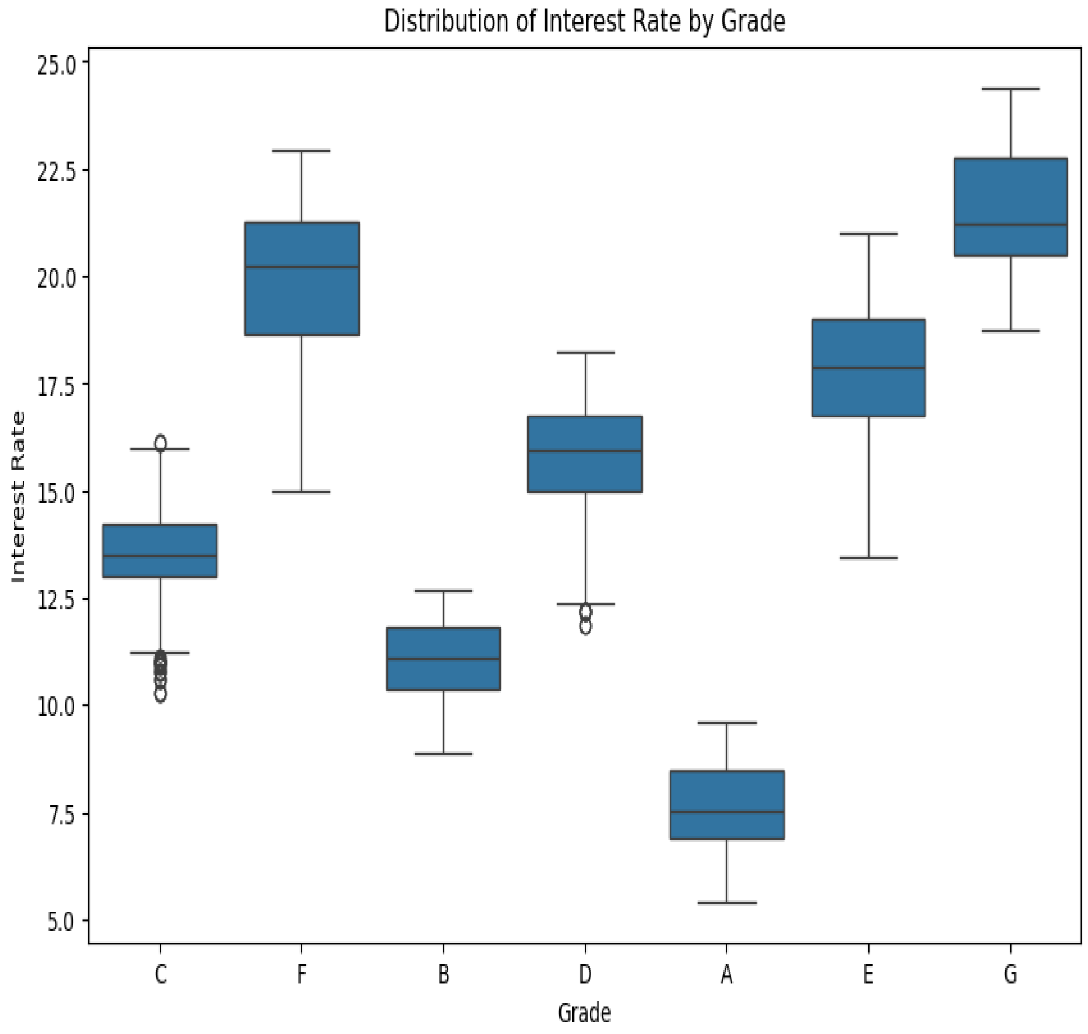
Observation: We find that all customers with charged off accounts carried a high debt payment to income ratio (dti) ranging from 3 to 30 for over 90% of the loans, so this can act as a big red flag when processing the loan.

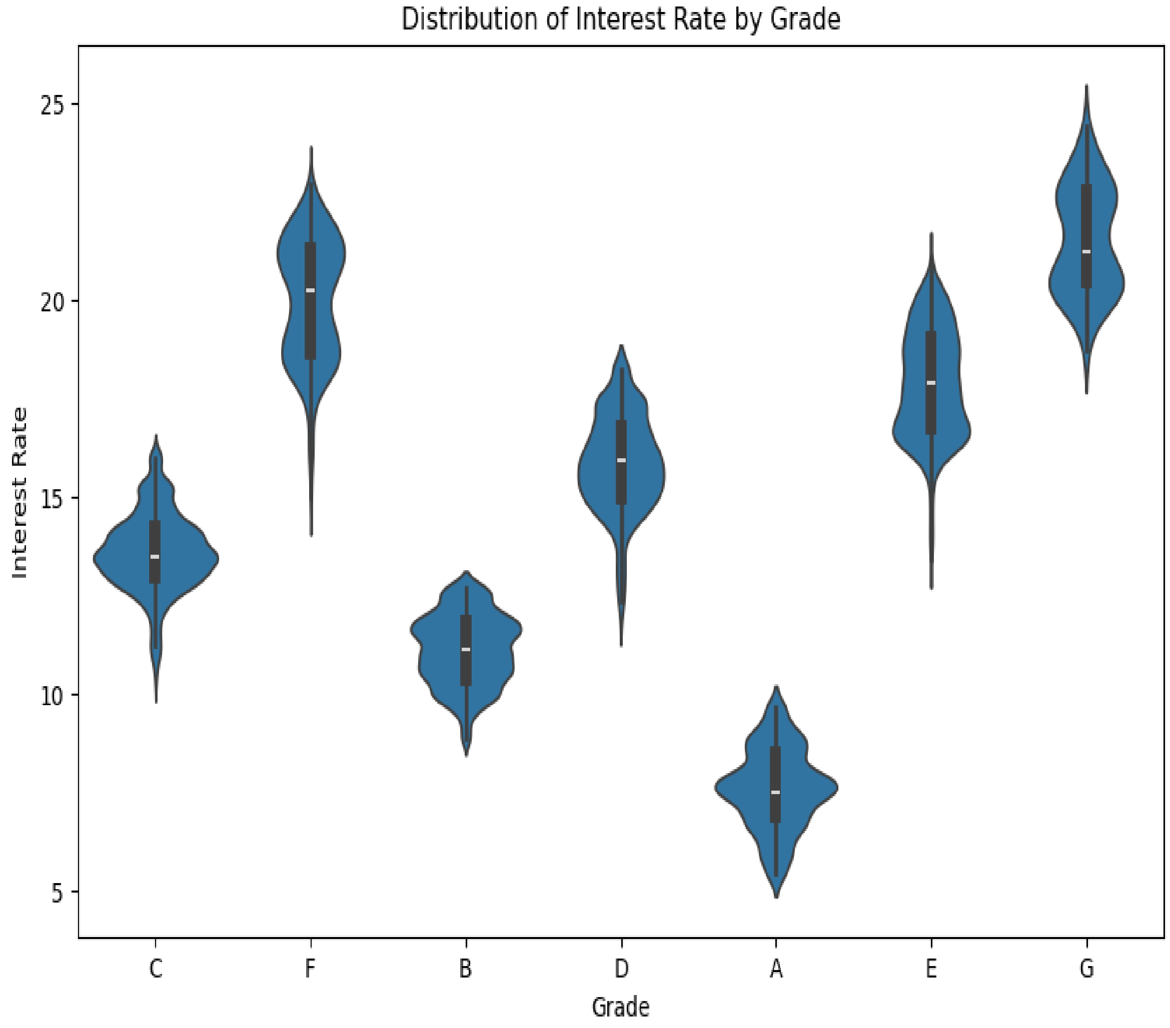
Distribution of Loan Amount by Grade for charged off accounts



- For charged off accounts, in grade E, F and G majority of the loans were given in a higher band (loan amount approx. 15-25k). There were lesser outliers because of this in these bands.
- In grades A, B, C and D majority had lower loan amounts (5k -15k) but had lot of outliers (loan amount above 30k).

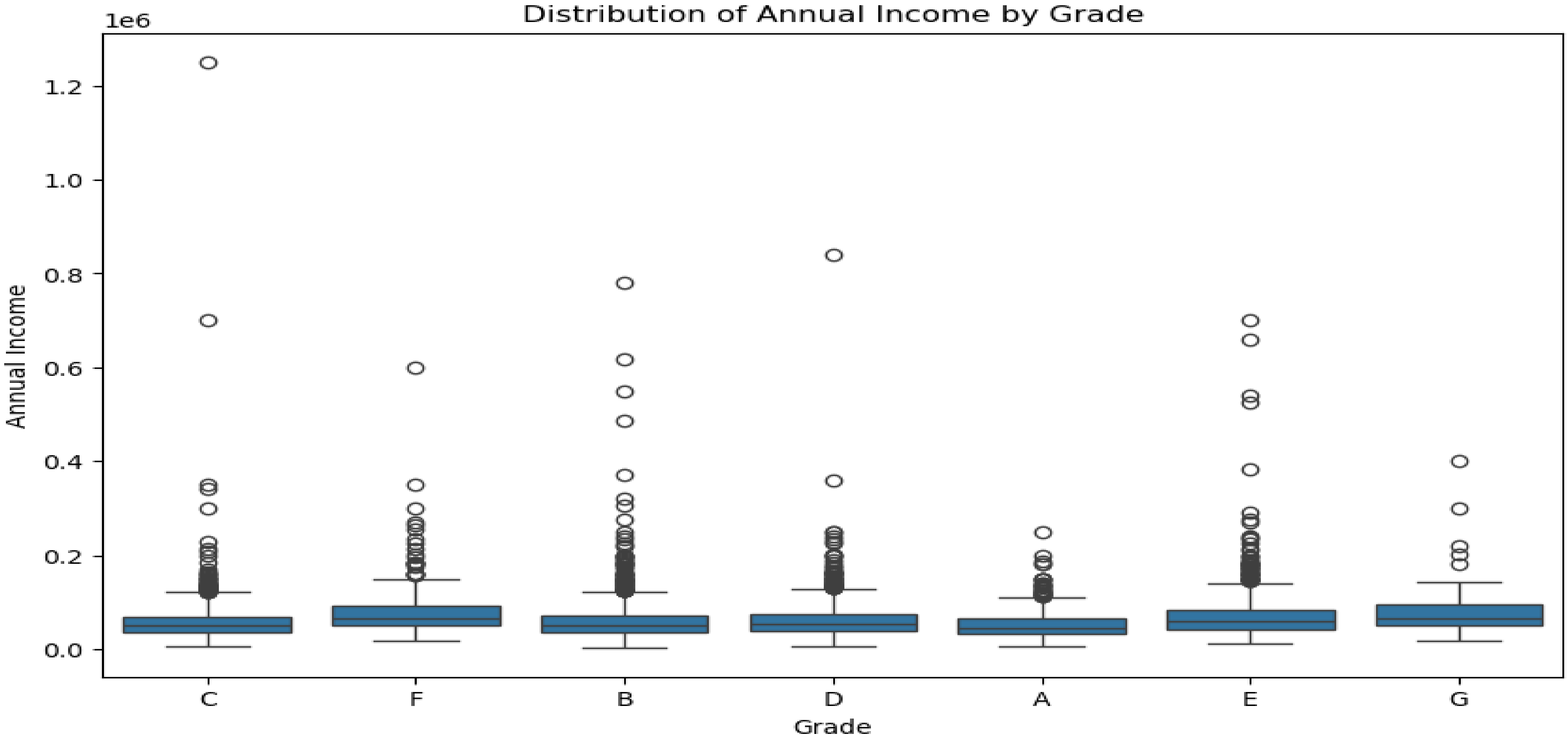
Distribution of Interest Rate by Grade for charged off accounts





- As grade decreases (A being highest and F being lowest), the interest rate increases.
- For grade A, majority of charged off accounts had interest rate from 6.0 - 7.5%, while G and F had interest rates up to 22.5%.
- There are lot of outliers in grades C and D. The outliers are on the lower side as well.
- People who were given an attractive (lower) interest rate also default.

Distribution of Annual Income by Grade for charged off accounts



- In every grade there were lots of people who were above max annual income for their grade and were charged off
- We can also infer that if someone is above max income for their grade they are more likely to not repay (and be charged off subsequently)

Summary of Findings

- Among charged off accounts, majority of loans were from 3,000 to 20,000 and there were some outliers (approx. 200 out of 5,627) who had loan amount over 32,000.
- Among charged off accounts, the most frequent purposes for taking loan were Debt consolidation, credit card, small business, and other which accounted for approx. 80% of all.
- Among charged off accounts, people with 10+ years are the single largest group, and along with low experienced (<1, 1, 2 and 3 years) make up for approx. 65% of charged off accounts.
- We find that all customers with charged off accounts carried a high debt payment to income ratio (dti) ranging from 3 to 30 for over 90% of the loans, so this can act as a big red flag when processing the loan.
- For charged off accounts, in grade E, F and G majority of the loans were given in a higher band (loan amount approx. 15-25k). There were lesser outliers because of this in these bands.
- In grades A, B, C and D majority had lower loan amounts (5k -15k) but had lot of outliers (loan amount above 30k).
- As grade decreases (A being highest and F being lowest), the interest rate increases.
- For grade A, majority of charged off accounts had interest rate from 6.0 - 7.5%, while G and F had interest rates up to 22.5%.
- There are lot of outliers in grades C and D. The outliers are on the lower side as well.
- People who were given an attractive (lower) interest rate also default.
- In every grade there were lots of people who were above max annual income for their grade and were charged off.
- We can also infer that if someone is above max income for their grade they are more likely to not repay (and be charged off subsequently).