Lending Case Study

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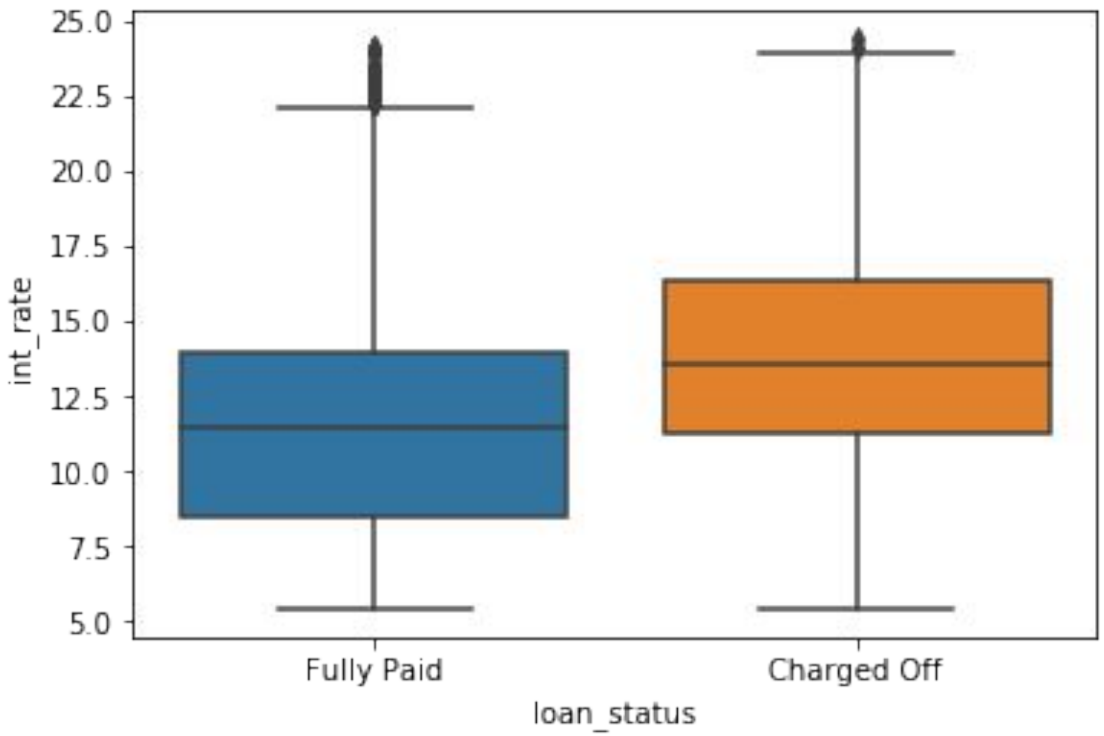
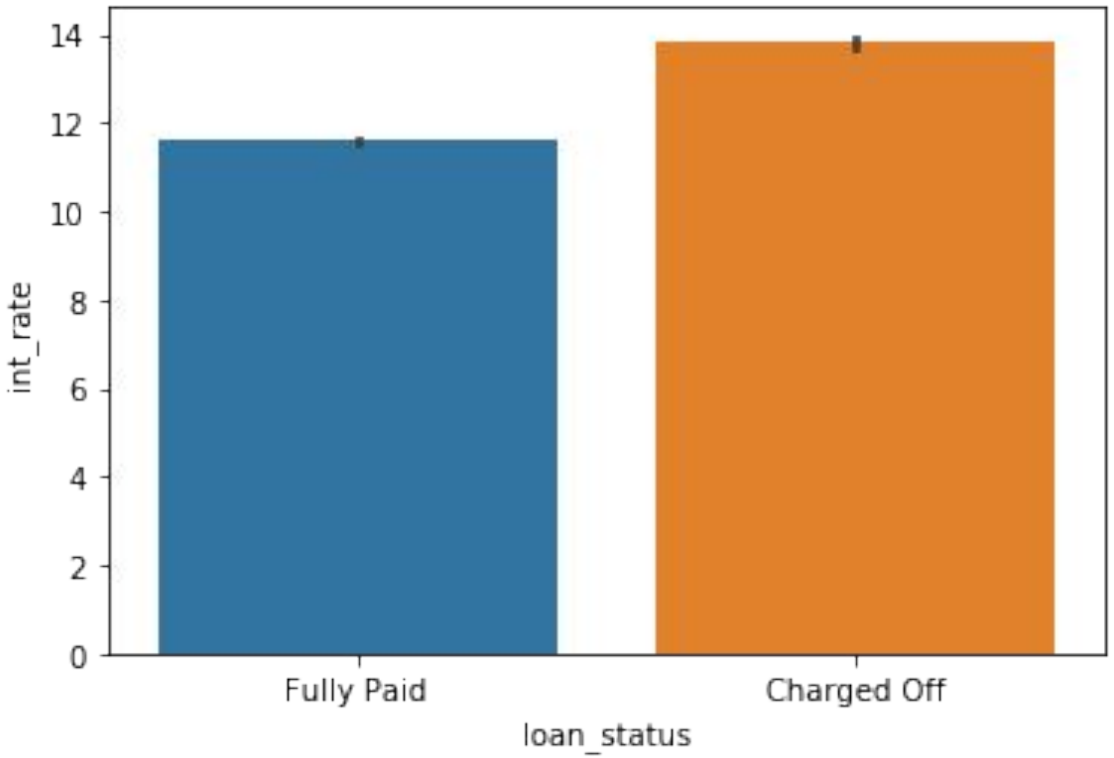
Background : Lending Case Study

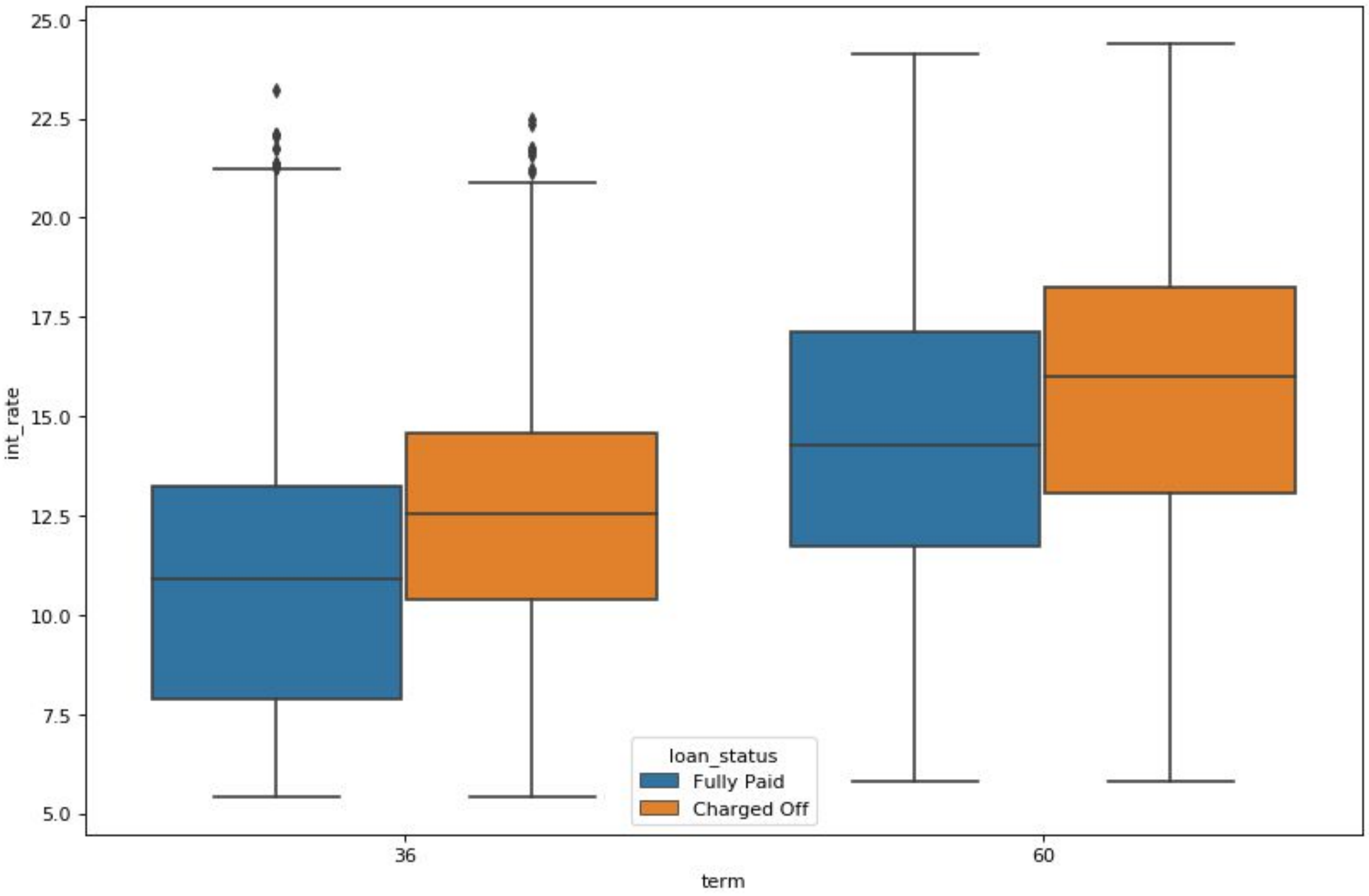
Lending Club is the largest peer to peer marketplace where borrowers can apply for a loan through an online platform and different investors can provide that loan based on the borrowers' profile.

In this case, we have studied data that was provided by Lending Club and analyzed when people are more likely to default.



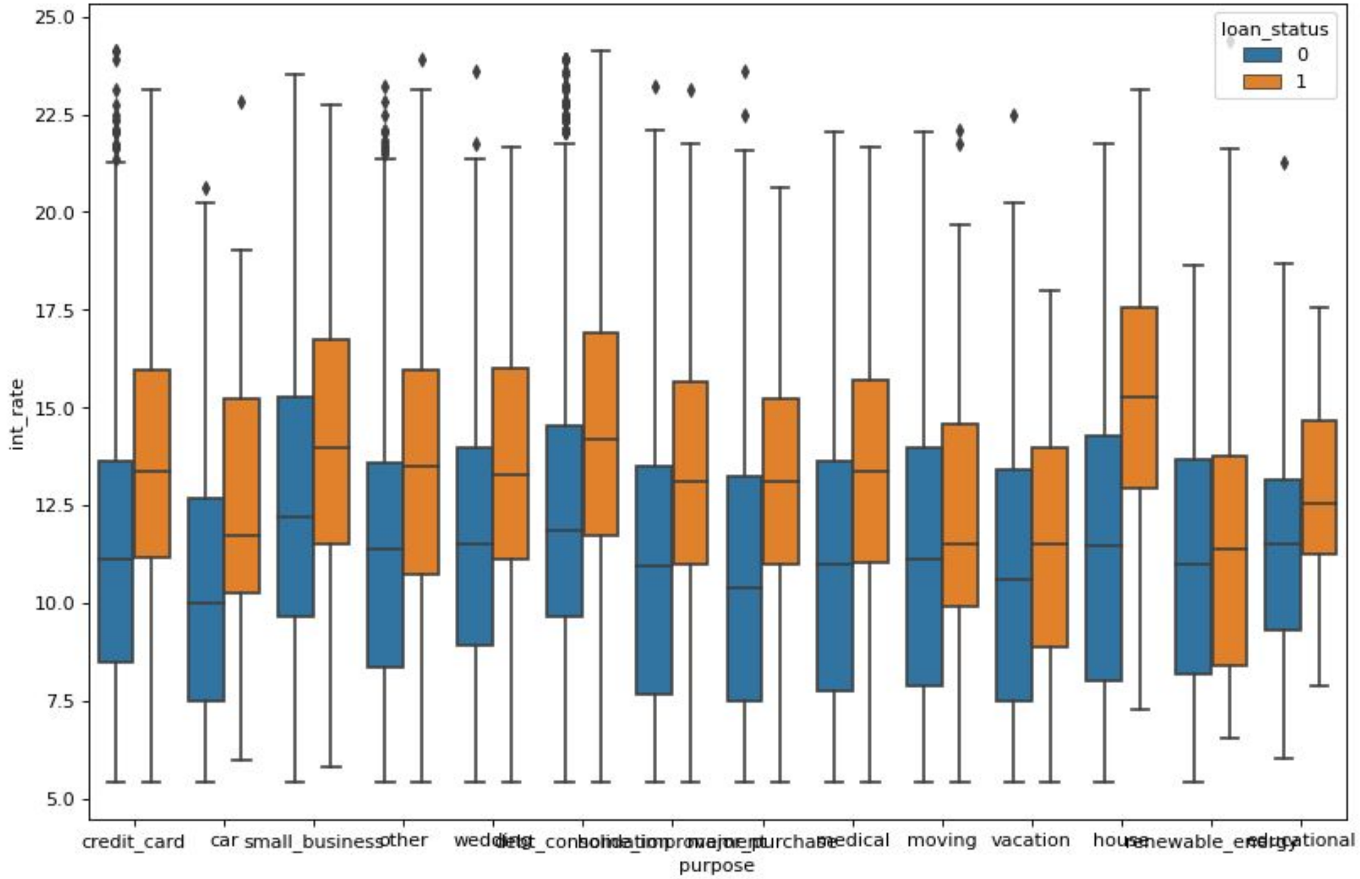


As we can see in the above graphs, Interest Rate was higher for Charged Off(Default) than Fully Paid loans.

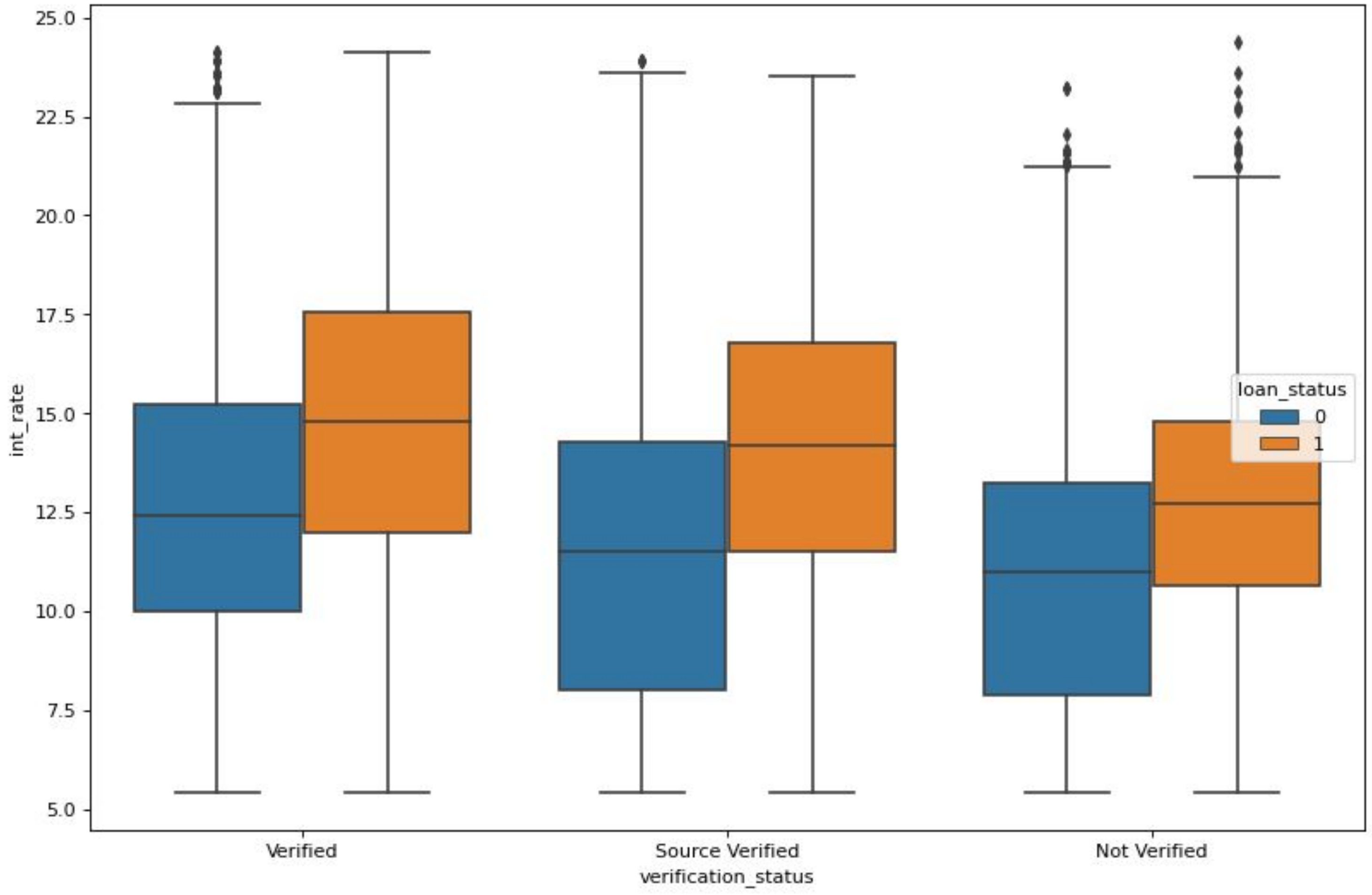


Significant difference can only be seen in interest rate vs term which suggest that for 36 and 60 months of terms, loan with higher interest rate are highly likely to default.

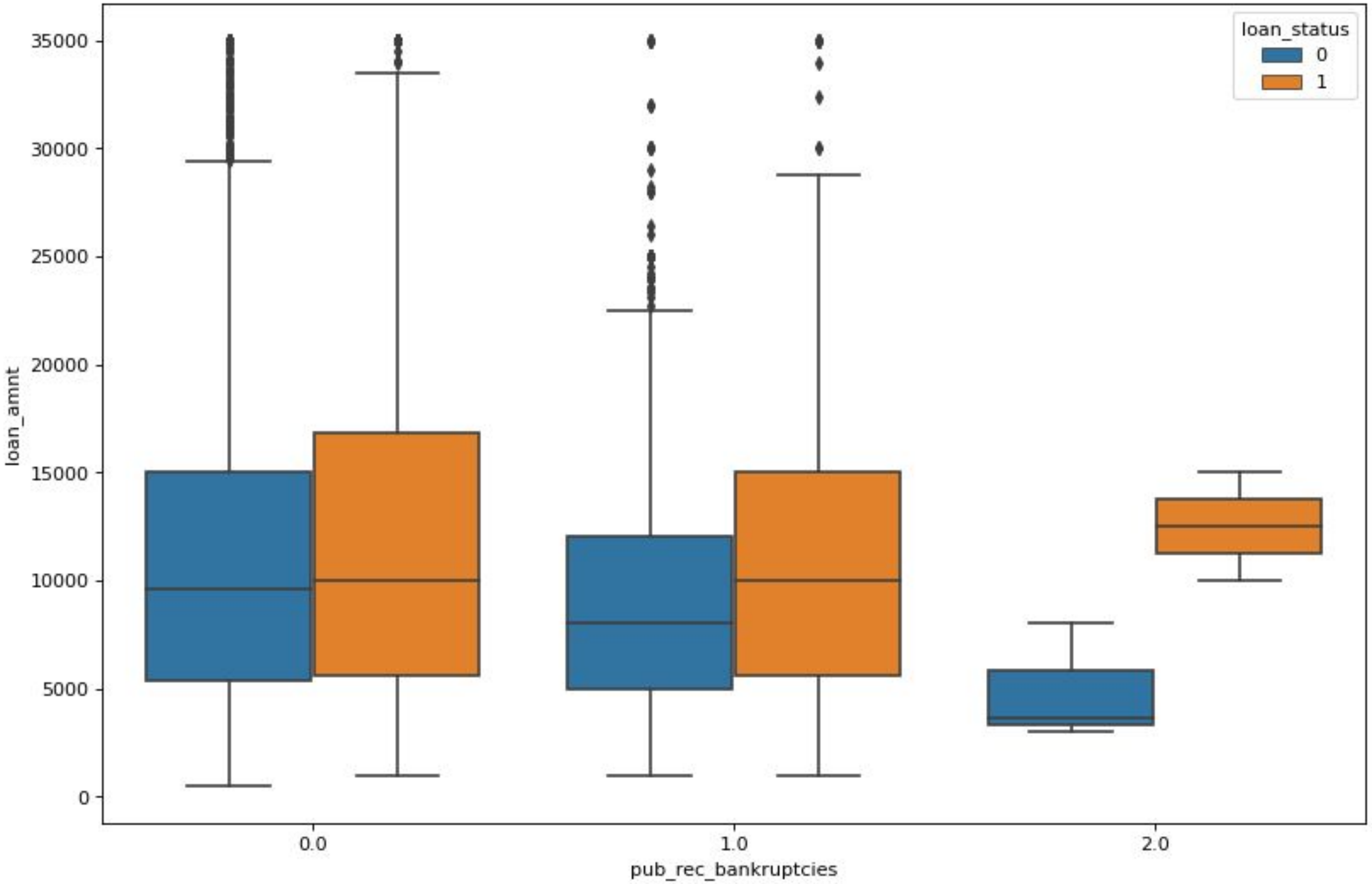
A significant difference can be seen in interest rate vs purpose plot which suggests that loans with higher interest rates irrespective of any purpose are less likely to pay off fully.



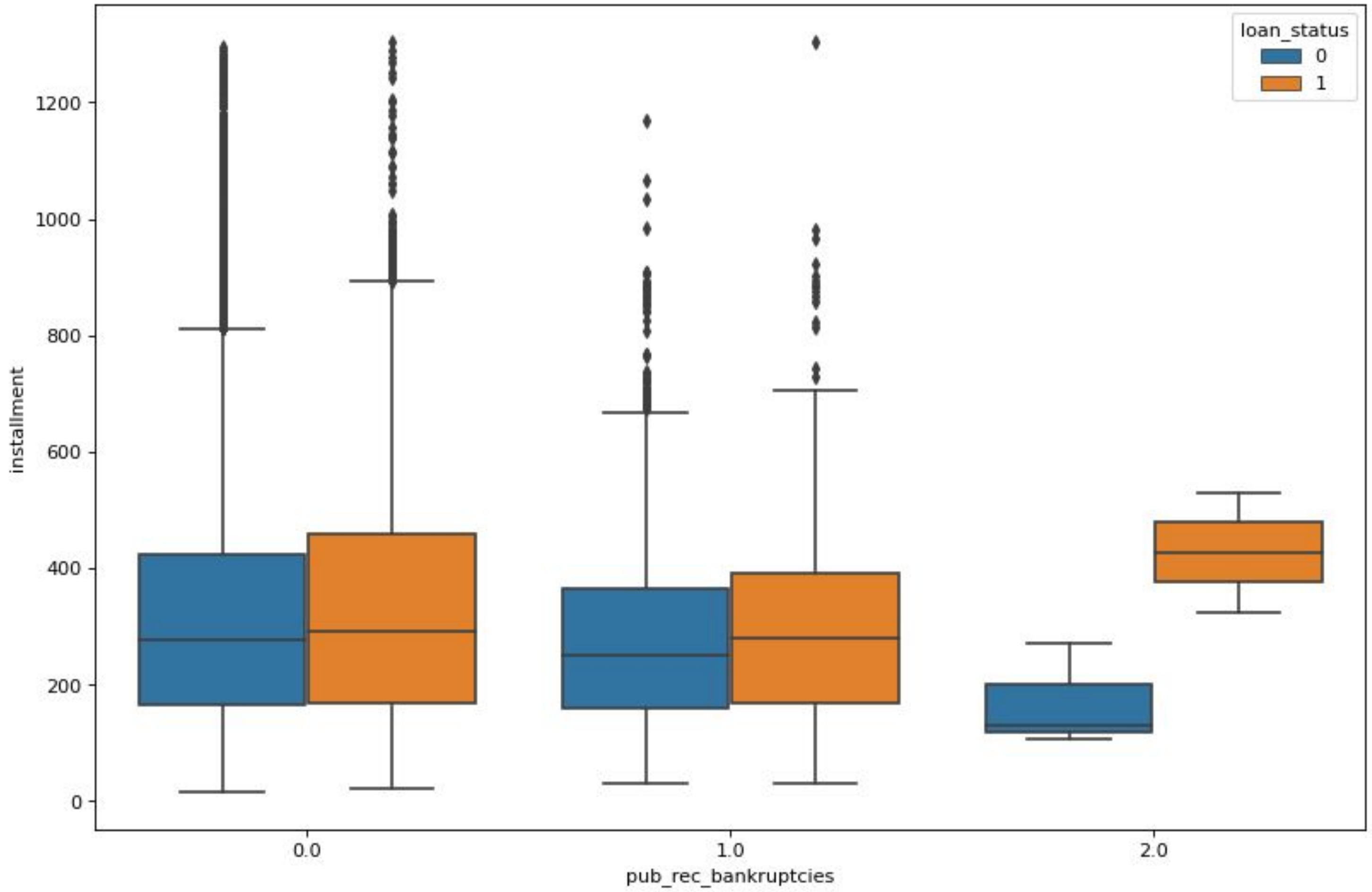
A significant difference can be seen in interest rate vs verification status which suggests that for any type of verification status, a loan with higher interest rate are highly likely to default.



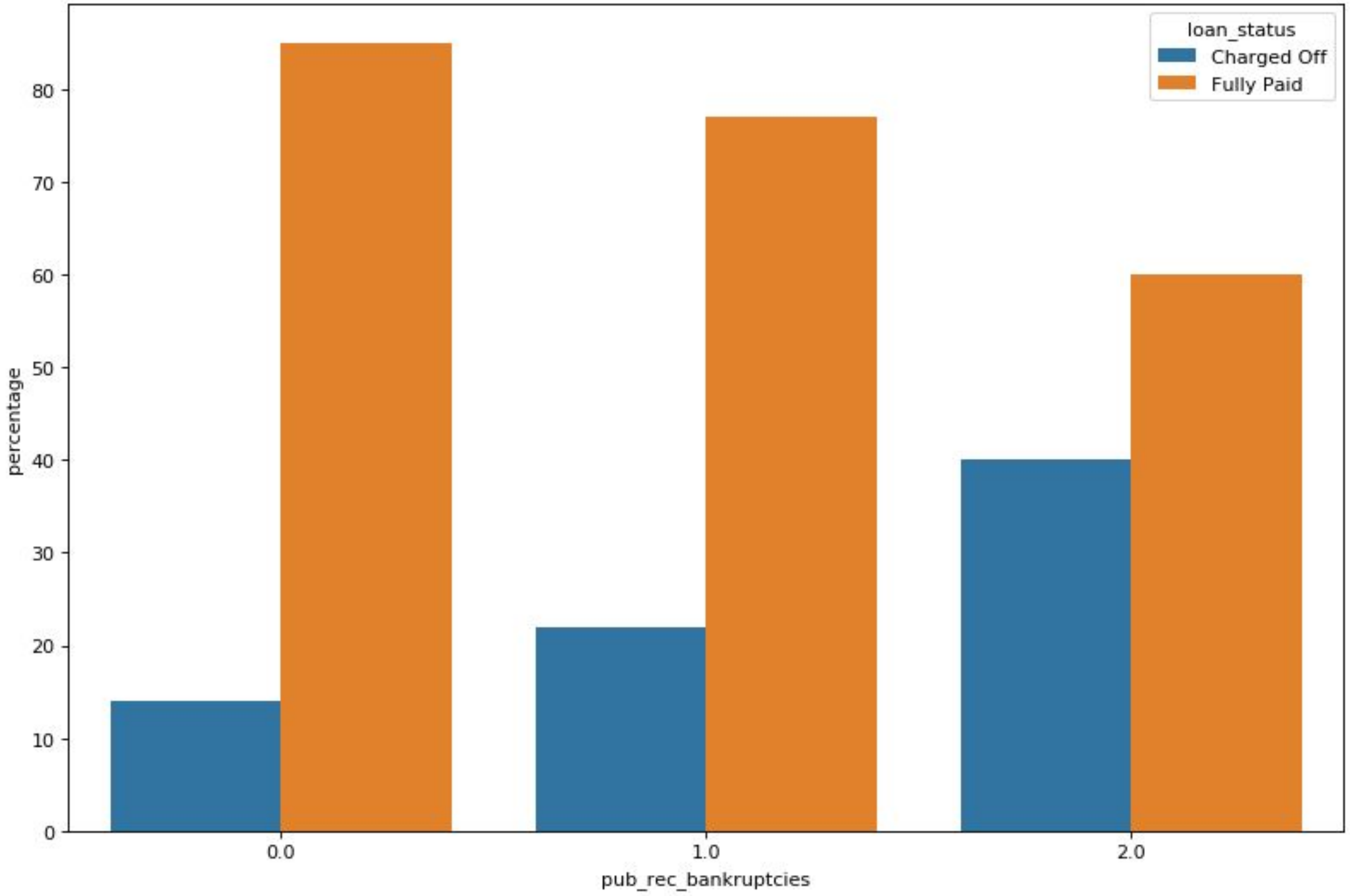
A significant difference can be seen in loan amount vs public _record bankruptcies plot which suggests that people with 2 public record bankruptcies and with high loan amounts are more likely to default.



A significant difference can be seen in installment vs public record _bankruptcies plot which suggests that people with 2 public record bankruptcies and with high installment amounts per month are more likely to default.



The graph suggests that if a person has 2 publically record bankruptcies are more likely to charged-off than 0 or 1 publically record bankruptcies.



Summary

1. The interest rate can be reduced since we observed that loans are high-interest rates are less likely to pay off fully.
2. The loan can be given to people with higher annual increases which are more likely to pay off their loans.
3. The loan can be denied to people who have 2 publically record bankruptcies since they are highly likely to charged-off(default) their loan.