



Lending Club Case Study

Background

LendingClub is a prominent peer-to-peer lending platform that facilitates the connection between individuals seeking loans (borrowers) and individuals or institutional investors willing to provide the funds (lenders). Borrowers apply through online platform.

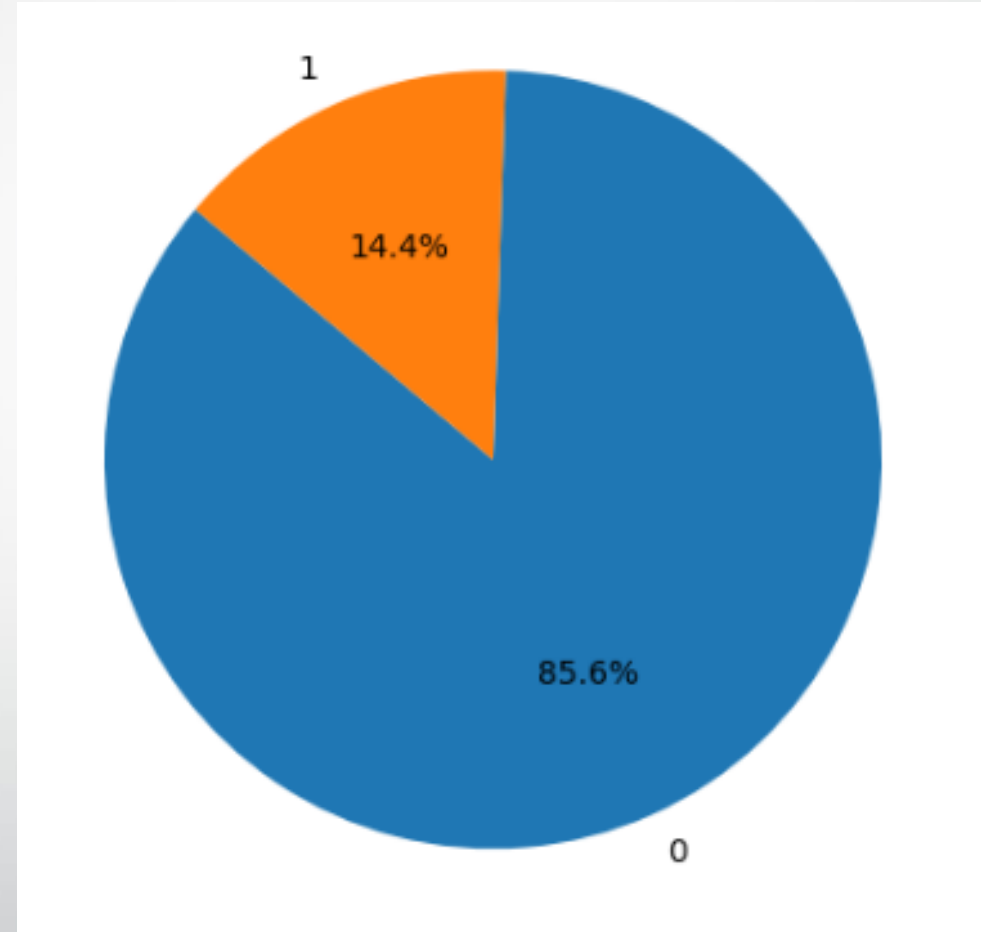
Business Objective:

To identify the variables which are strong indicators of default and provide insights to make the decision

Data Understanding

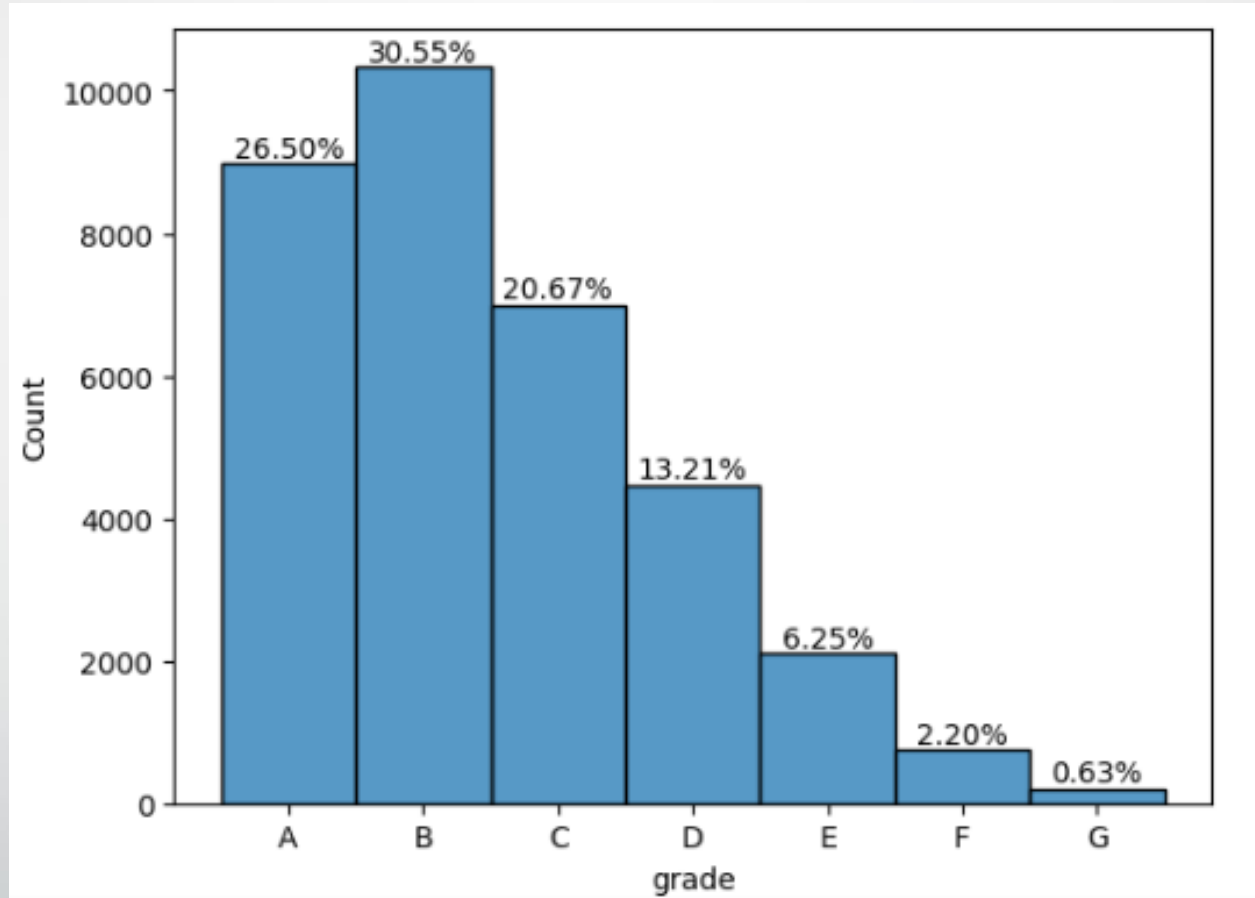
Default Distribution

14.4% of the Total Loans are Default



Loan Distribution Across Grades

30.55% Of The Total Loans
Are Given To Grade B



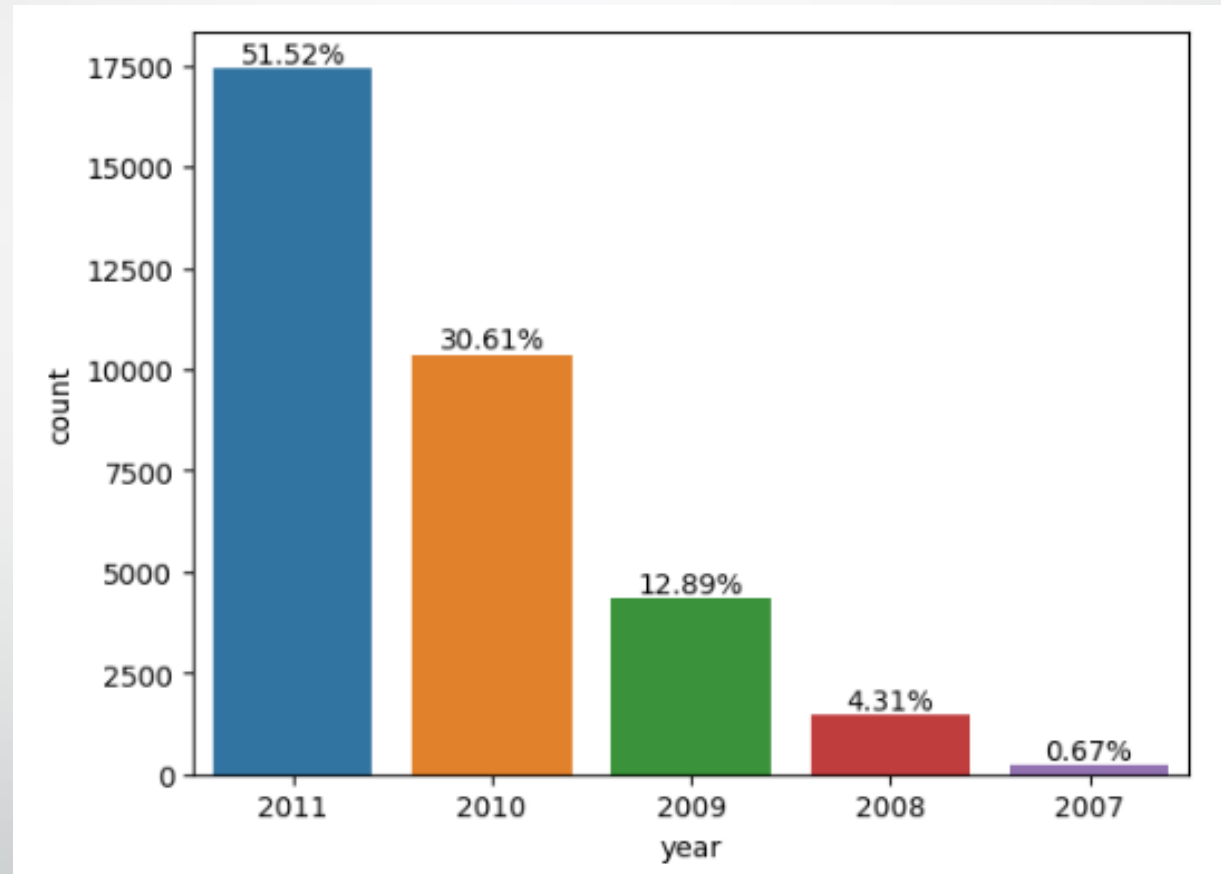
Time Frame of Data 2007-2011

75% Increase In Applicants

In 2011 Compared To 2010

120% Increase In Applicants

In 2010 Compared To 2009



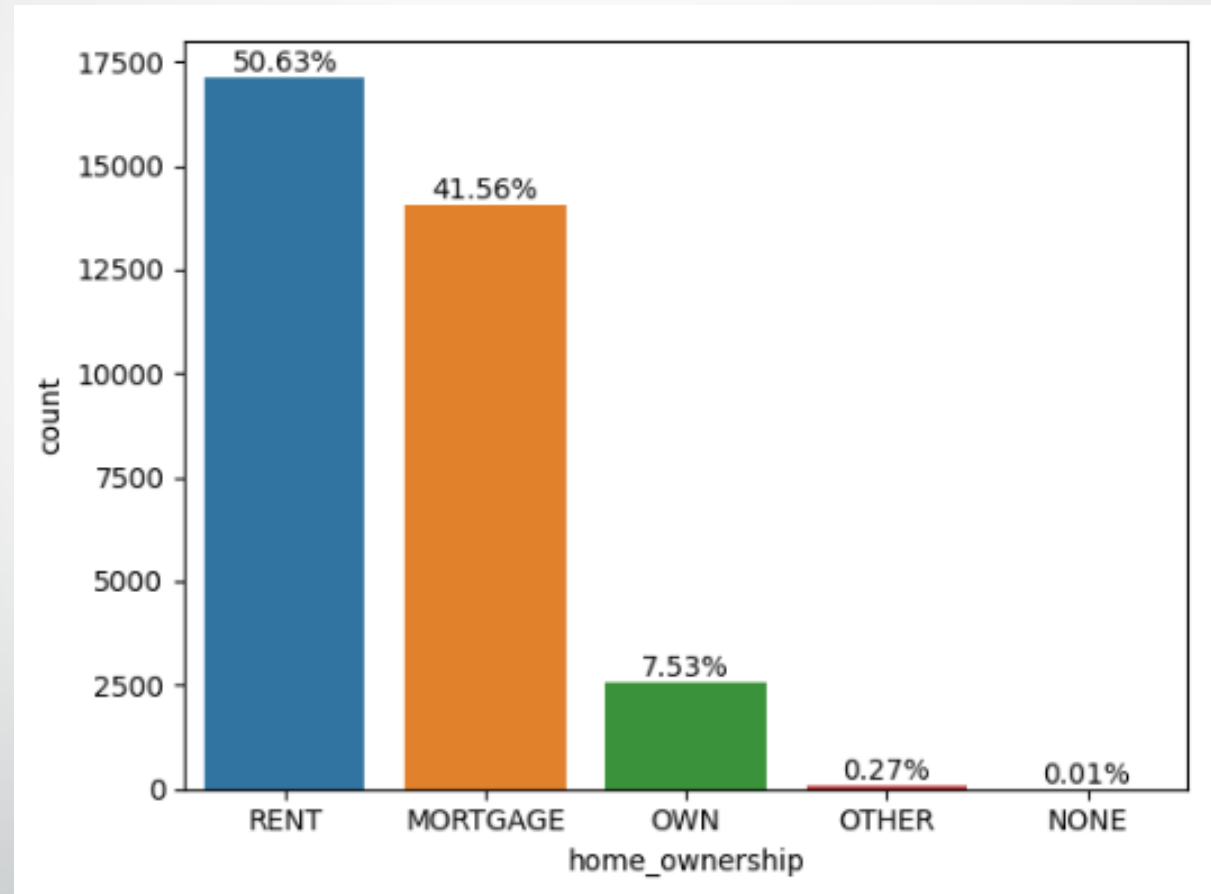
Home Ownership

50.63% Of The Loan

Applicant Lives In Rented
Home

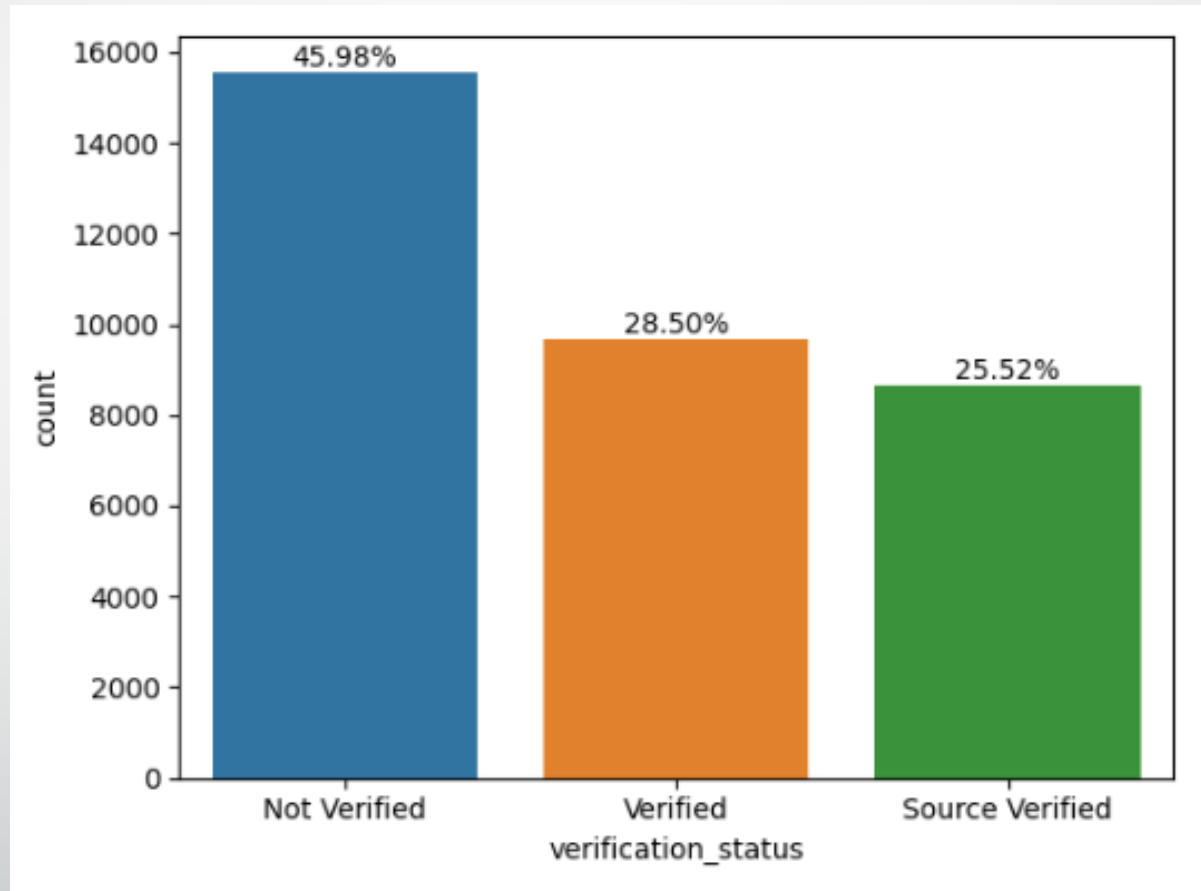
41.56% Of The Loan

Applicant Has Mortgaged
Their Home



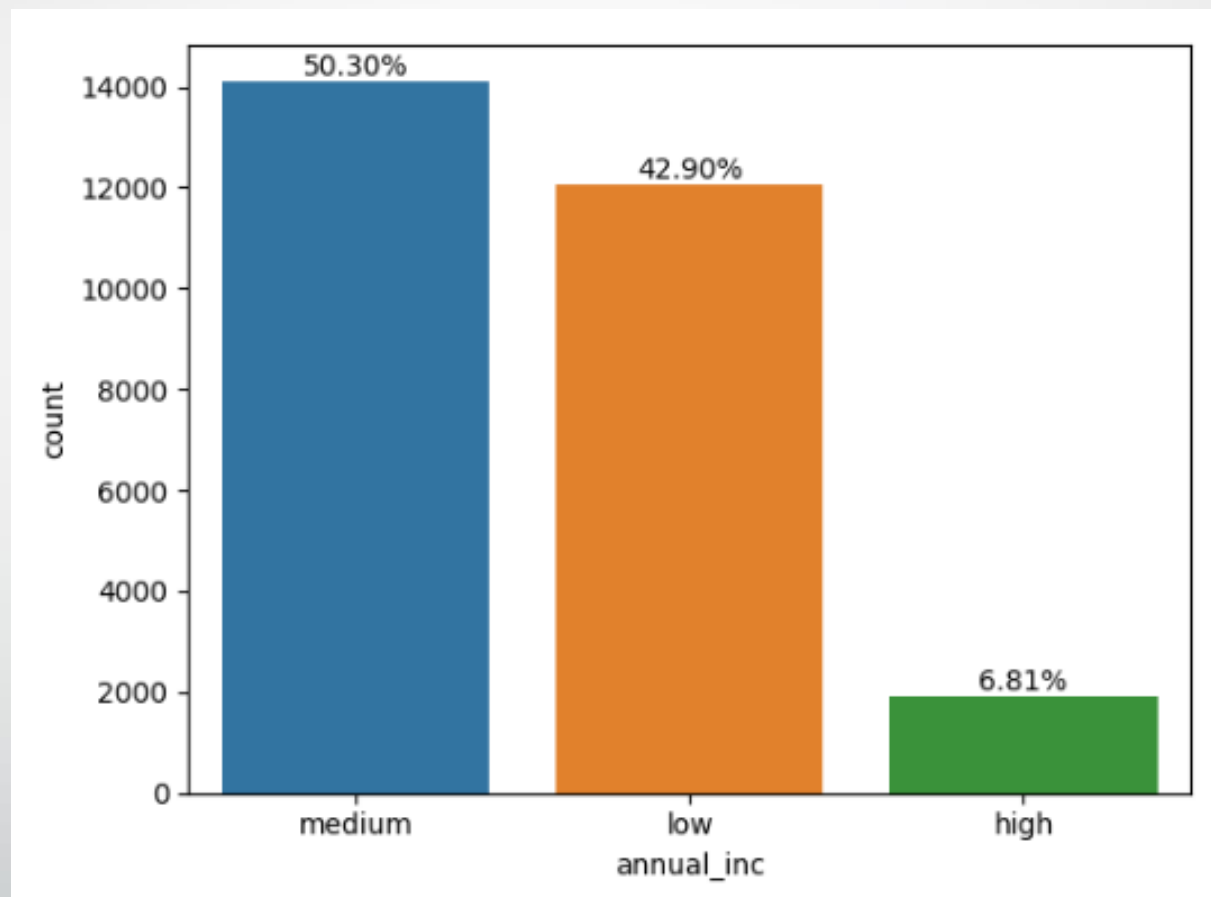
Loan Applicant Verification

45.98% Of The Loan Applicants Are Not Verified



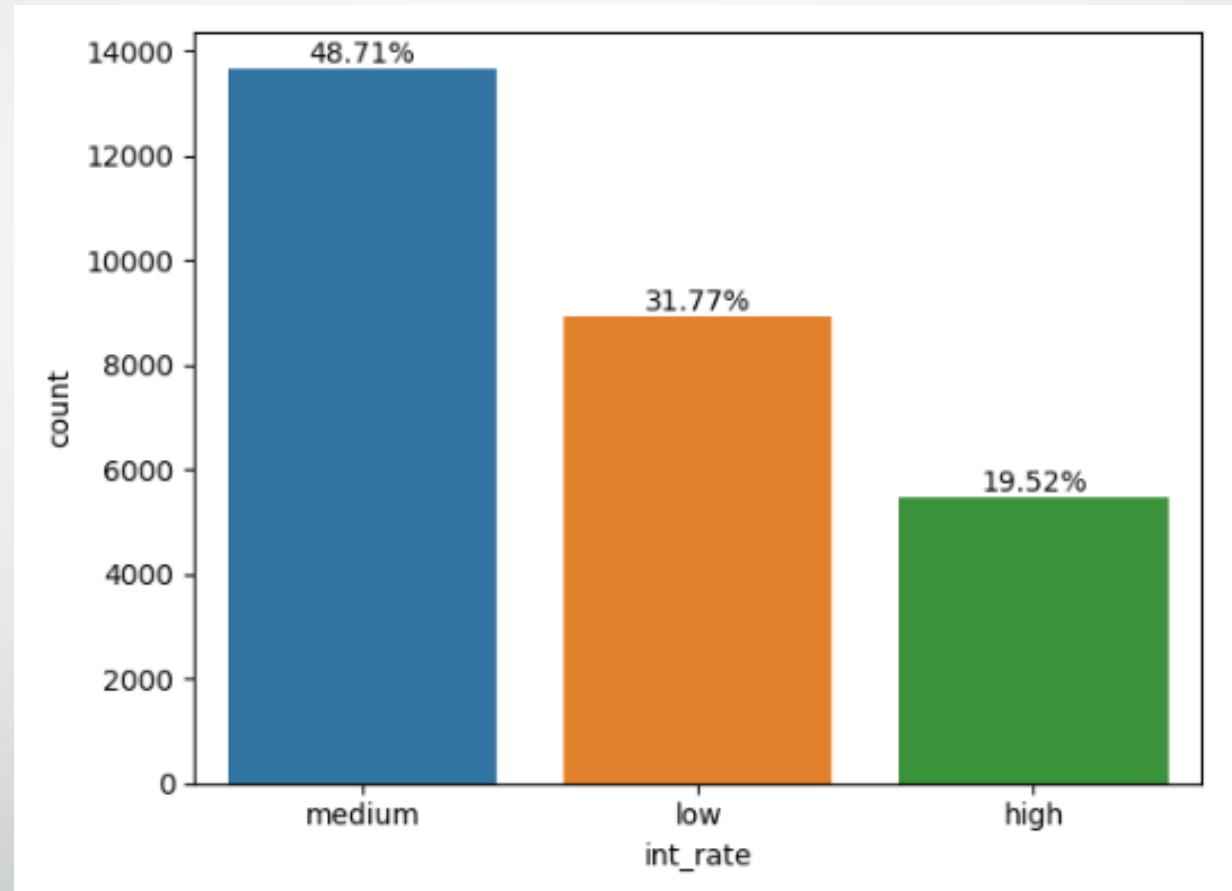
Loan Applicant's Annual Income

50.30% Of The Loan Applicants Have Annual Income In The Range Of 100000 To 150000



Loan Interest Rate

48.71% Of The Loans Are
Given At Interest Rate
Between 10% To 15%



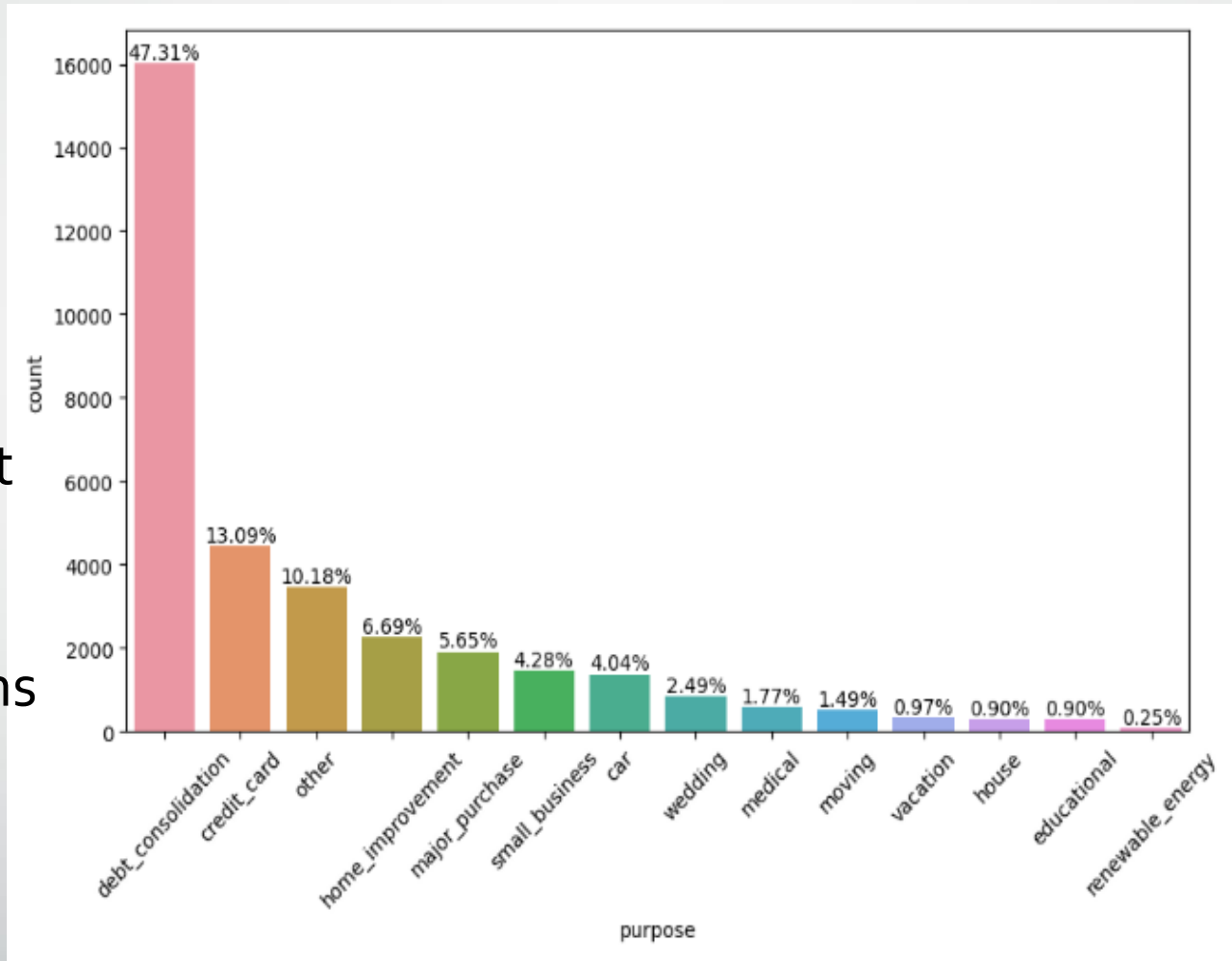
Loan Purpose Distribution

47.31% Debt Consolidation Loans

13.09% Credit Card Loans

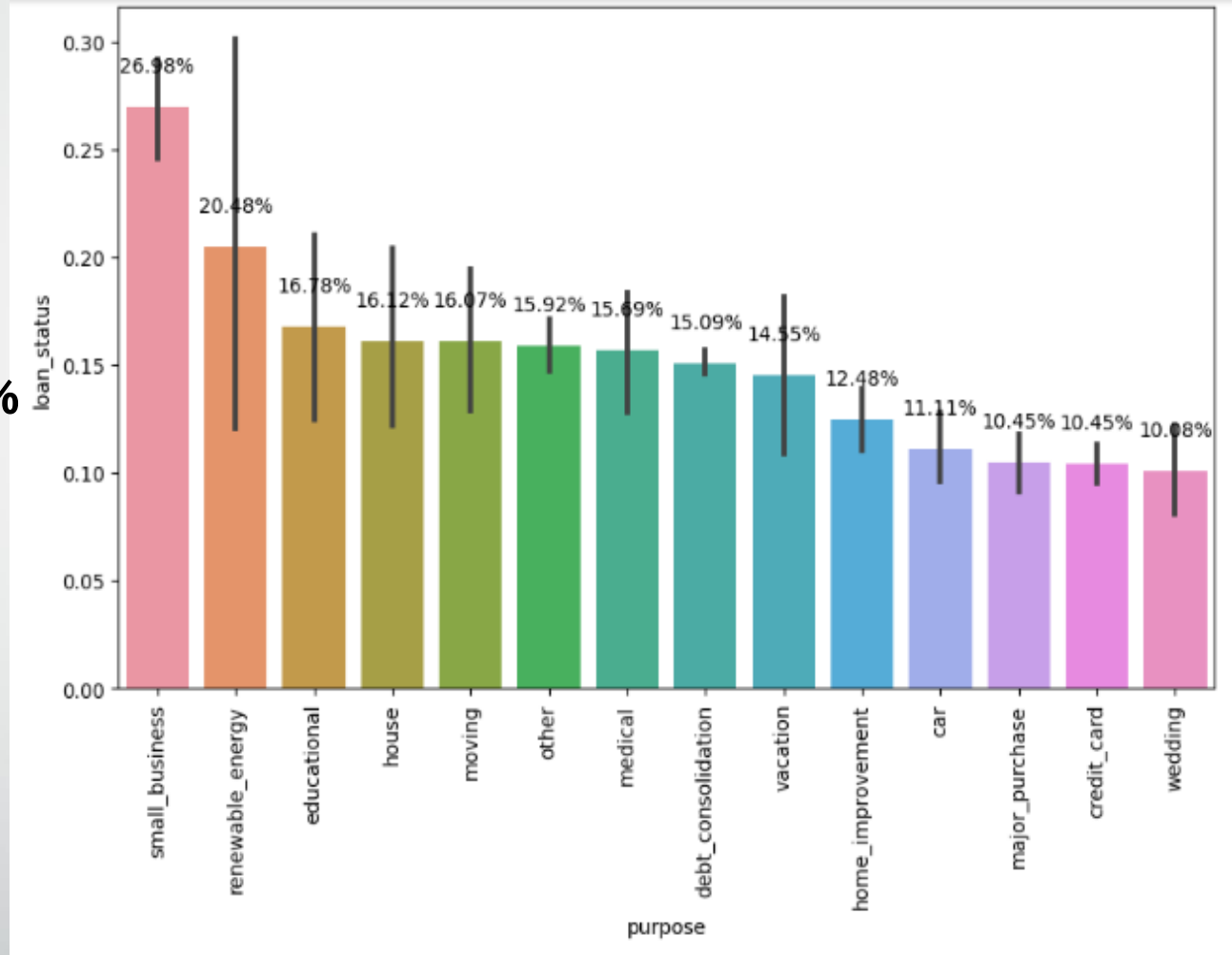
6.69% Home Improvement Loans

5.65% Major Purchase Loans



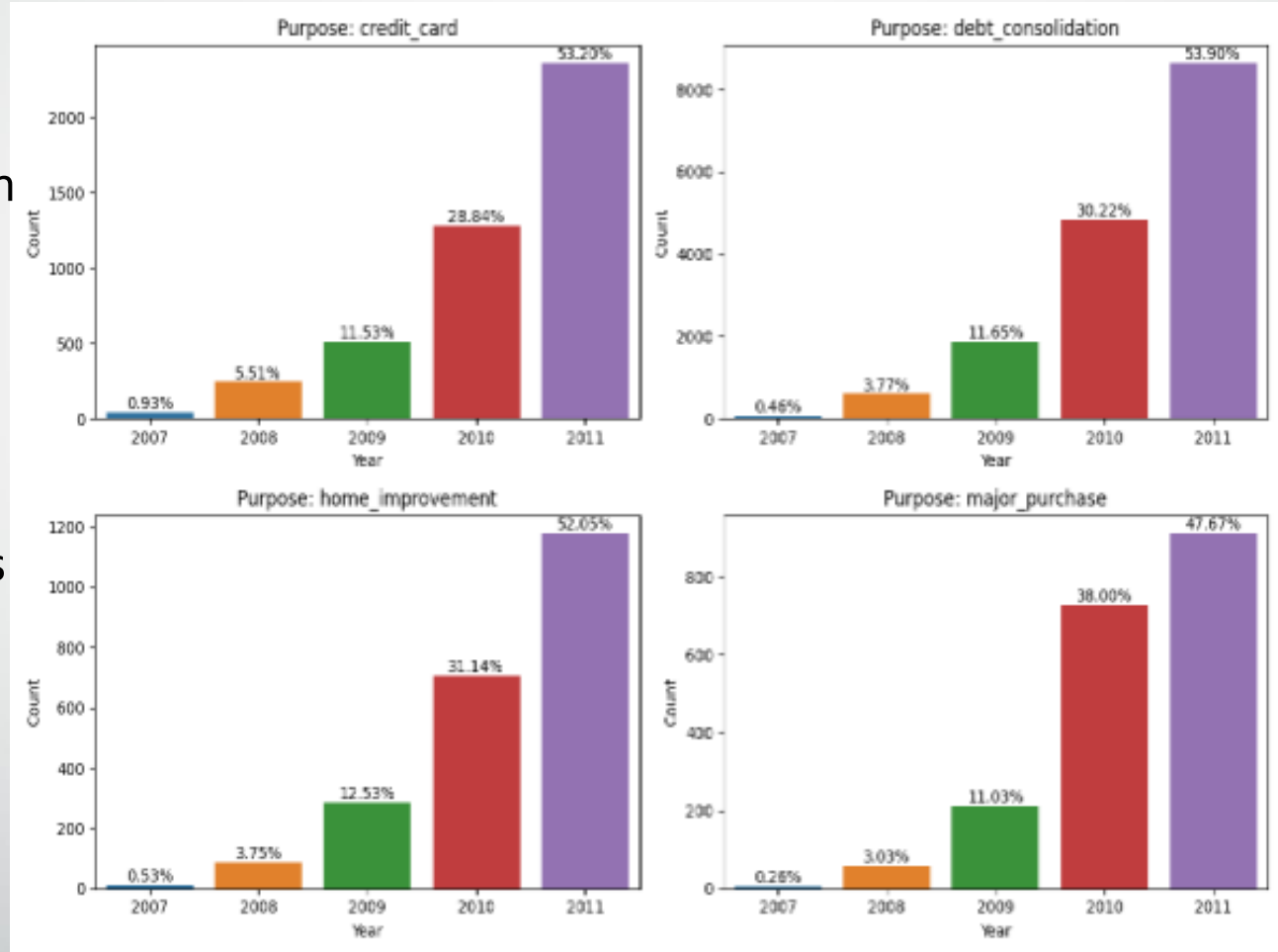
Default Rate Across Loan Purpose

- Small Business – 26.98%
- Educational – 20.48%
- House – 16.12%
- Debt Consolidation – 15.09%
- Credit Card – 10.45%
- Major Purchase – 10.45%



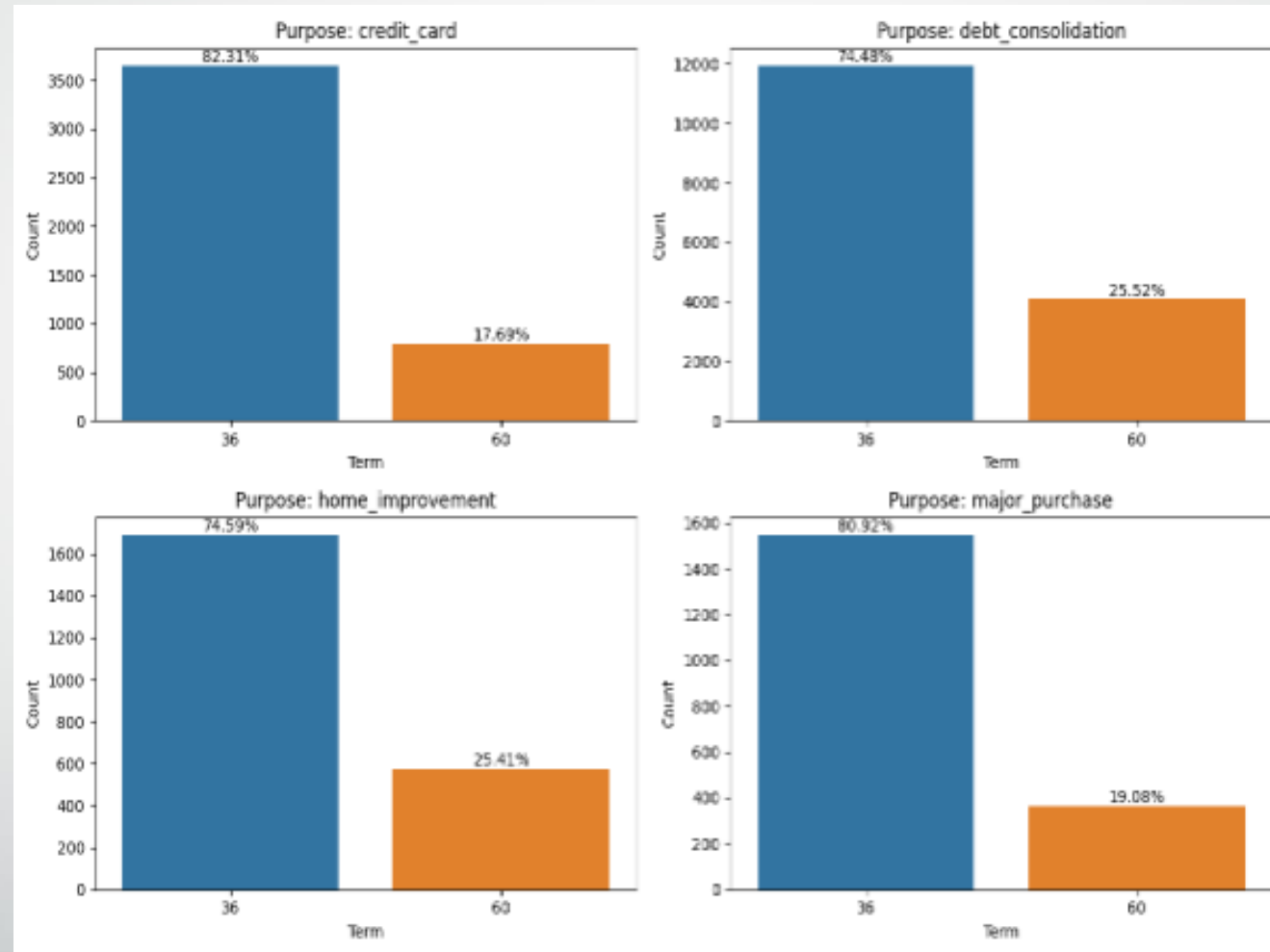
Top 4 Products Over Time

- There Is Increase In Home_Improvement Loans In Year 2010
- 340% More Debt Consolidation Loans Are Given Than Credit Card Loans

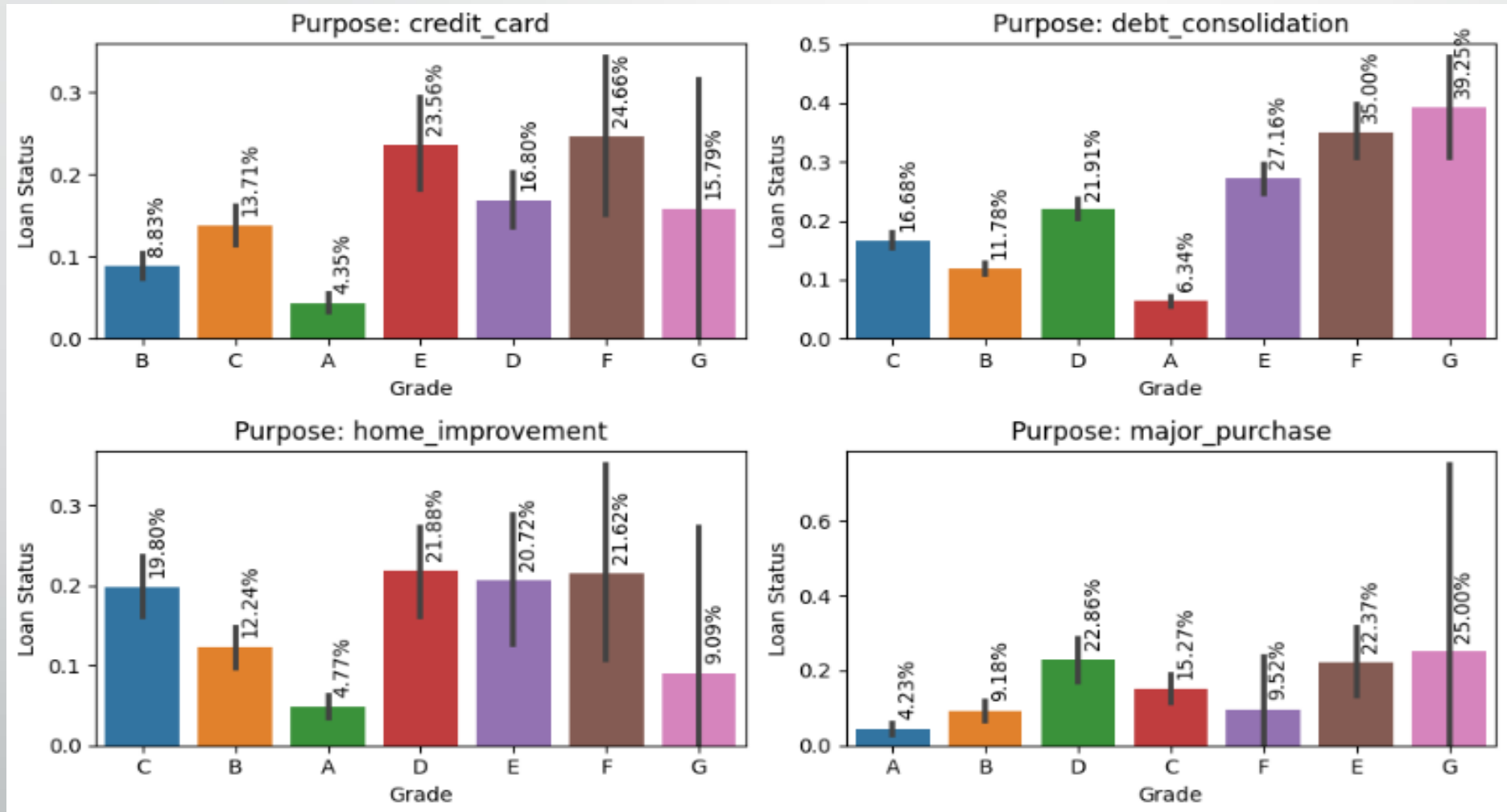


Term Distribution In Top 4 Products

Across All Products Majorly
36 Month Term Loan Is Given

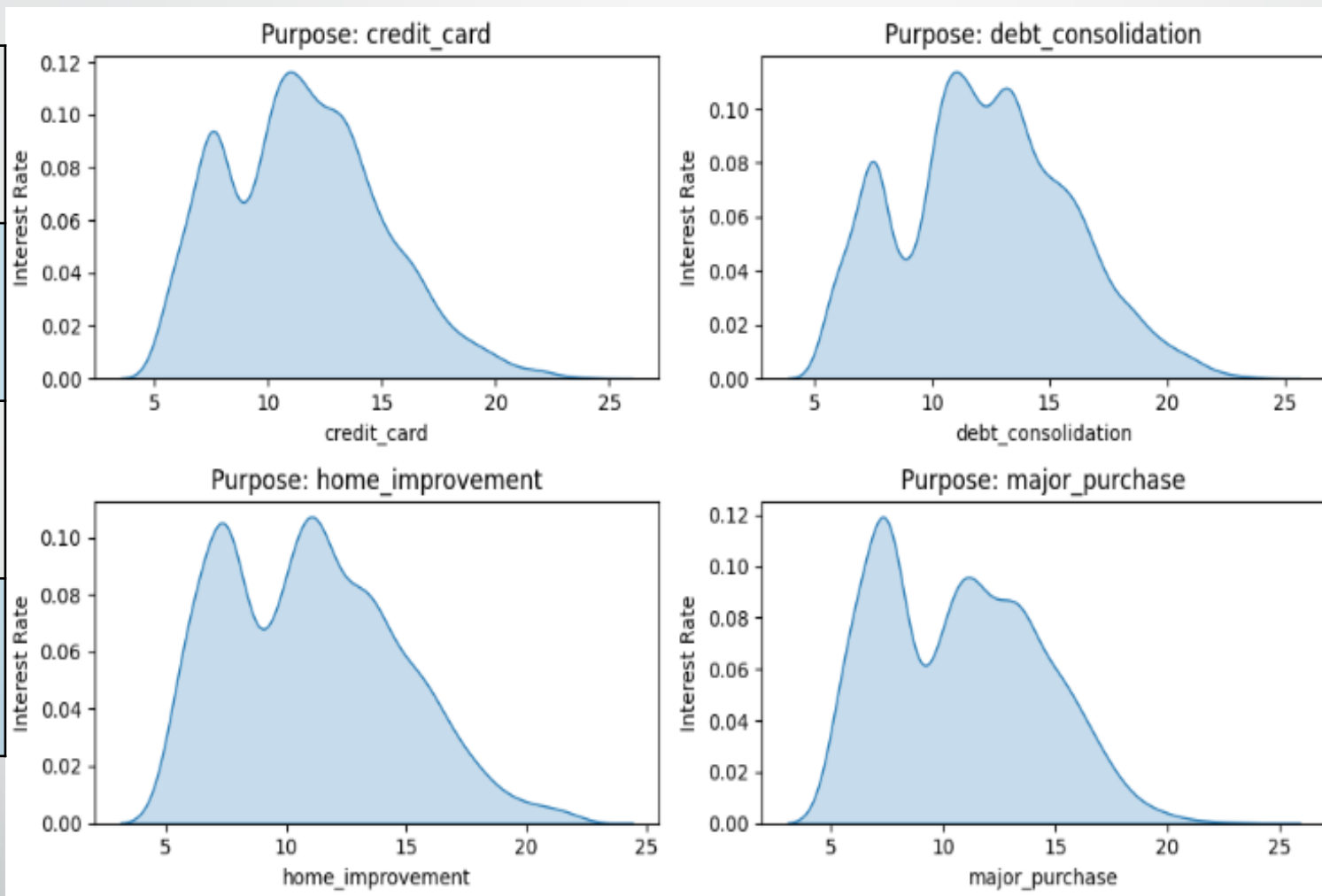


Grade Distribution In Top 4 Products

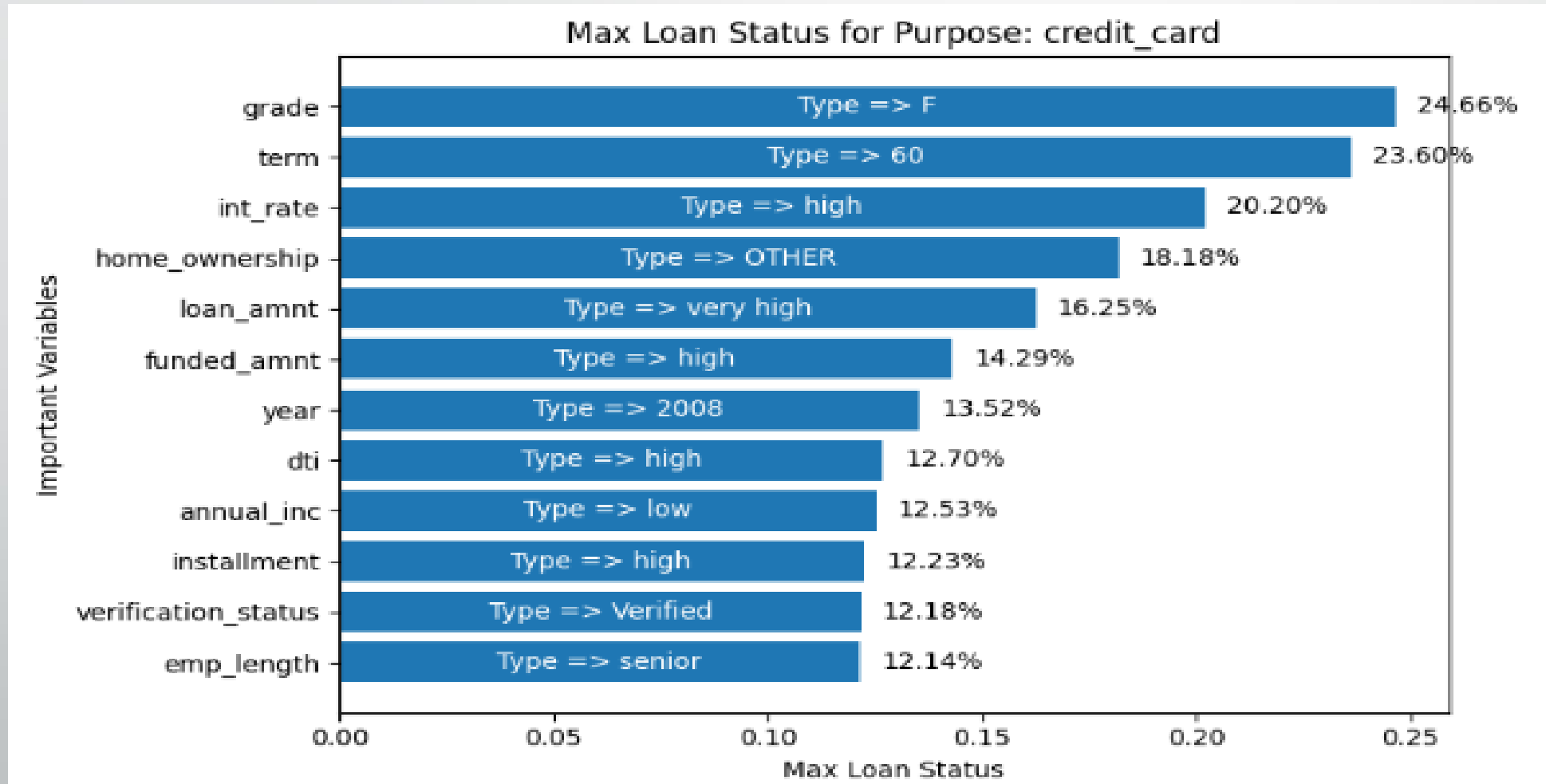


Interest Rate In Top 4 Products

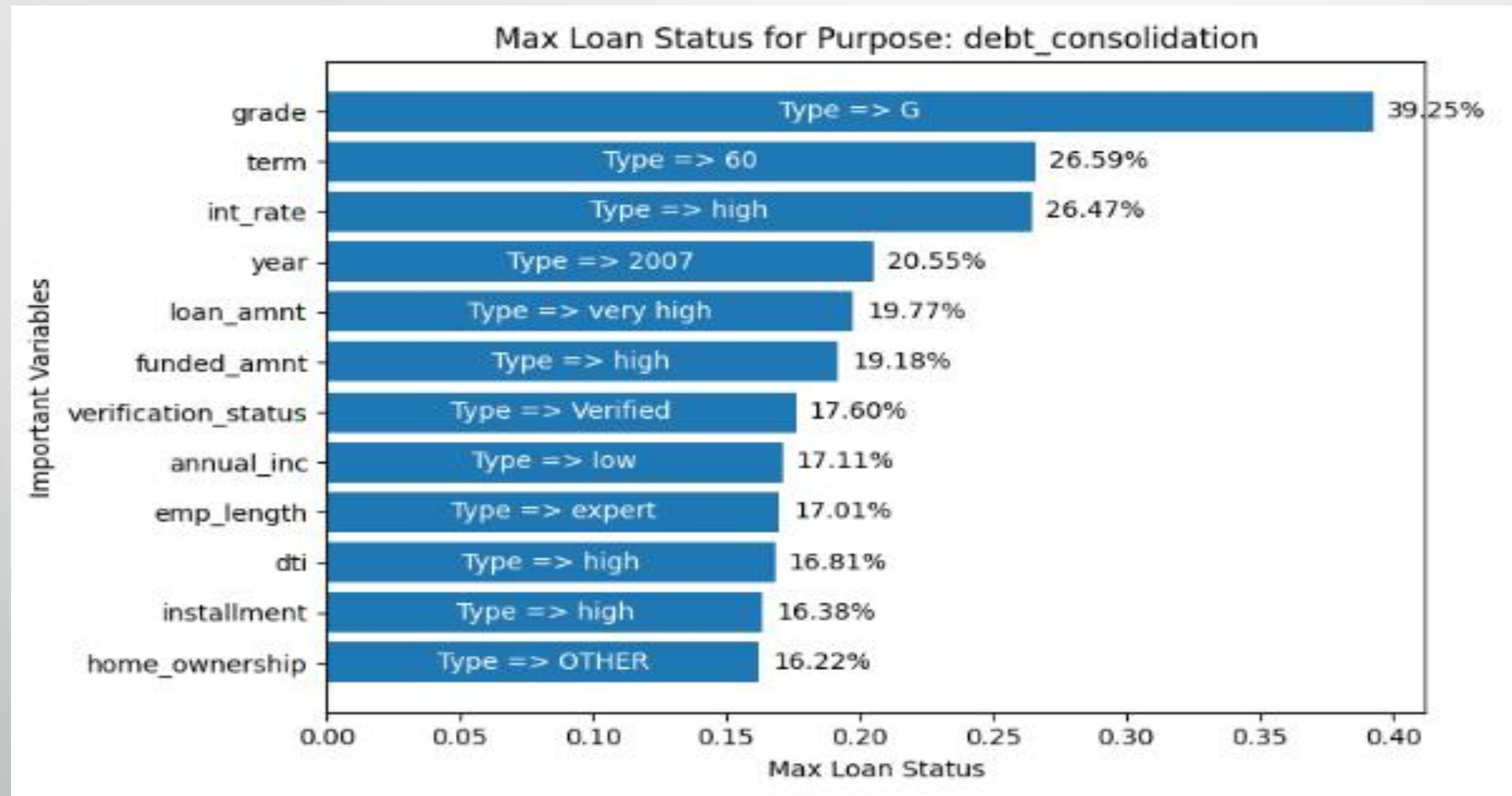
Credit Card	12%
Debt Consolidation	11%
Home Improvement	11%
Major Purchase	12%



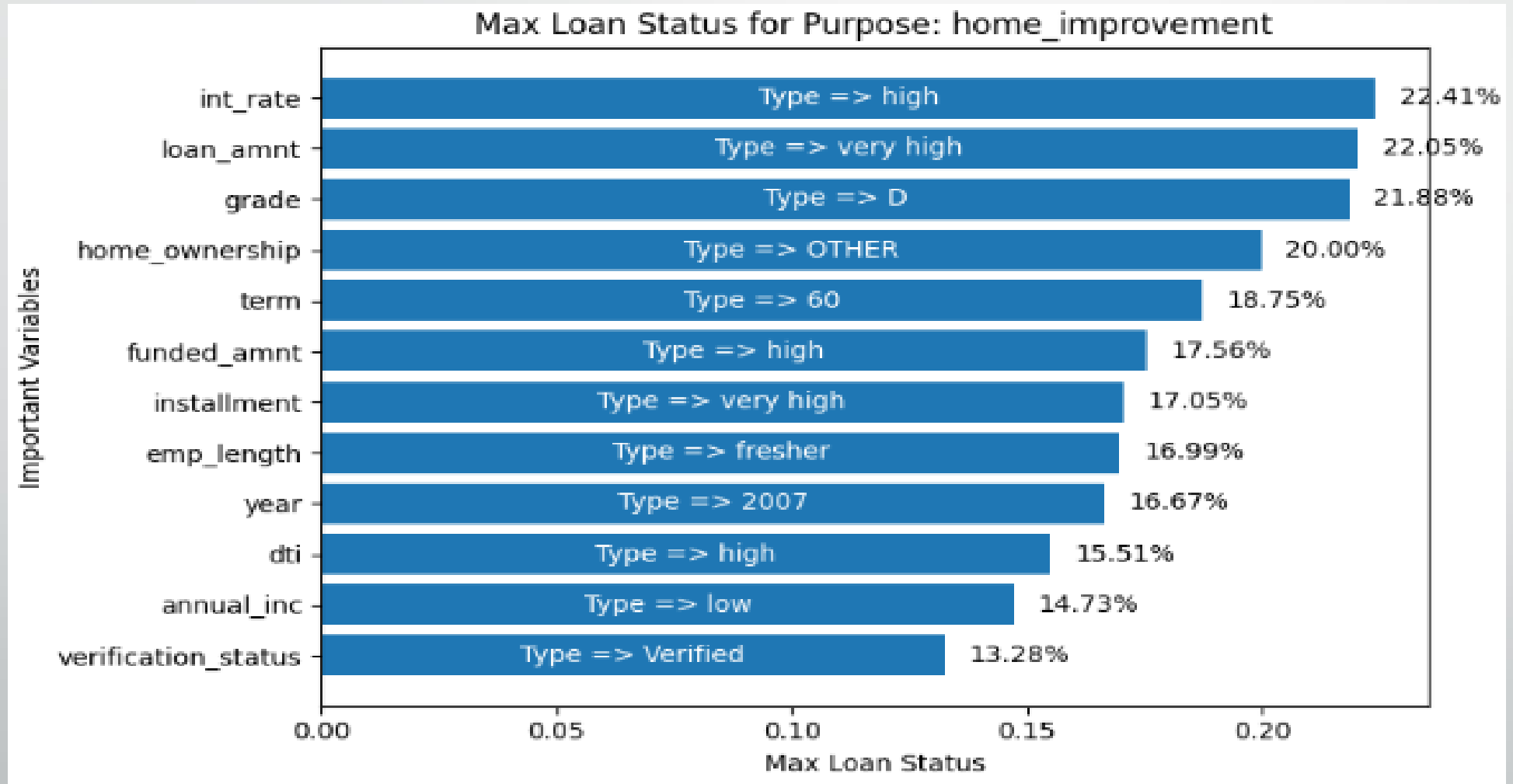
Important Variable : Credit Card



Important Variable : Debt Consolidation



Important Variable : Home Improvement



Important Variable :Major Purchase

