



# 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.

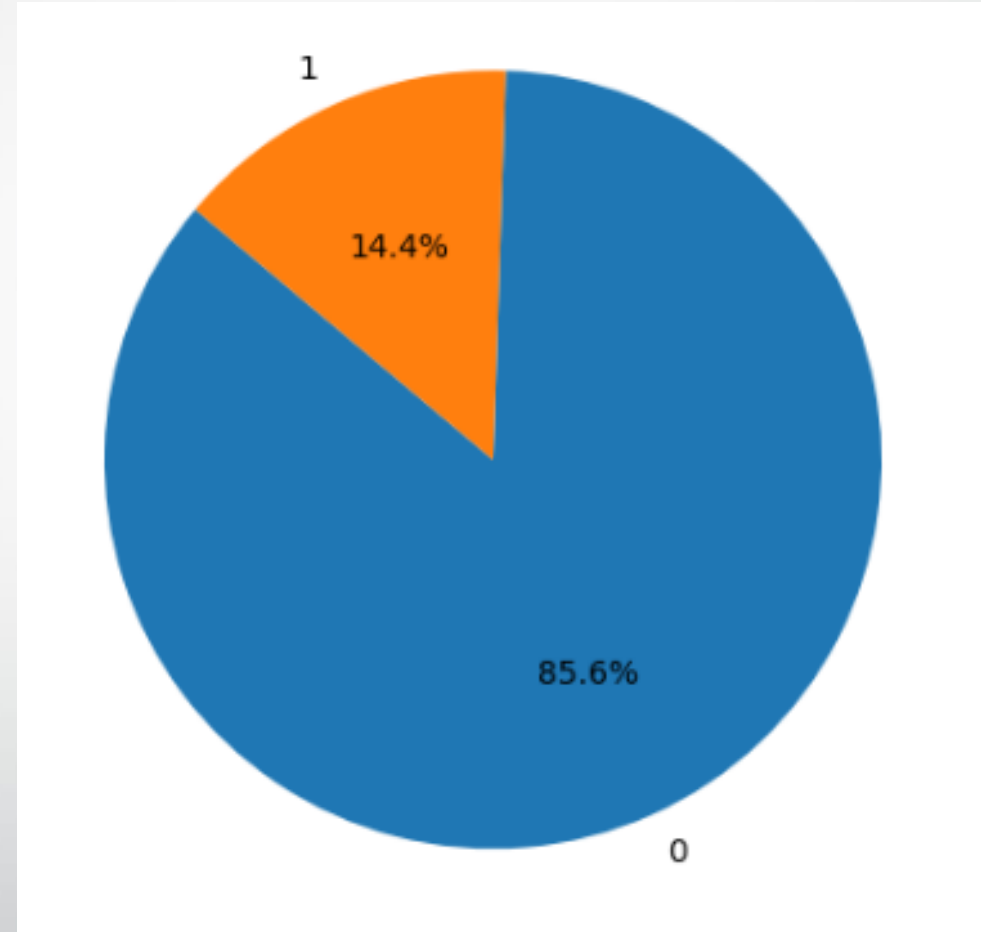
Business Objective:

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

# Data Understanding

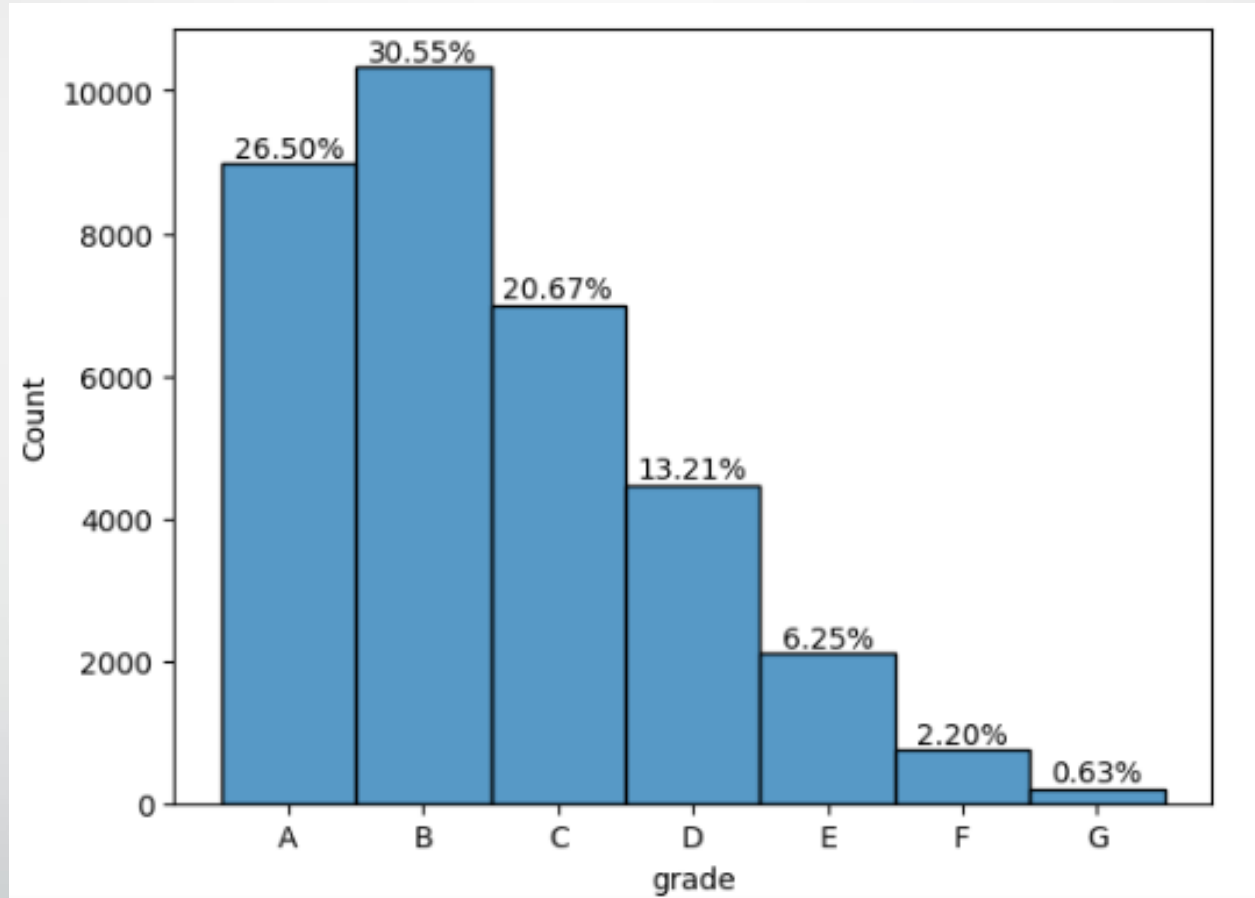
## Default Distribution

14.4% of the Total Loans are Default



# Loan Distribution Across Grades

**30.55%** Of The Total Loans  
Are Given To Grade B



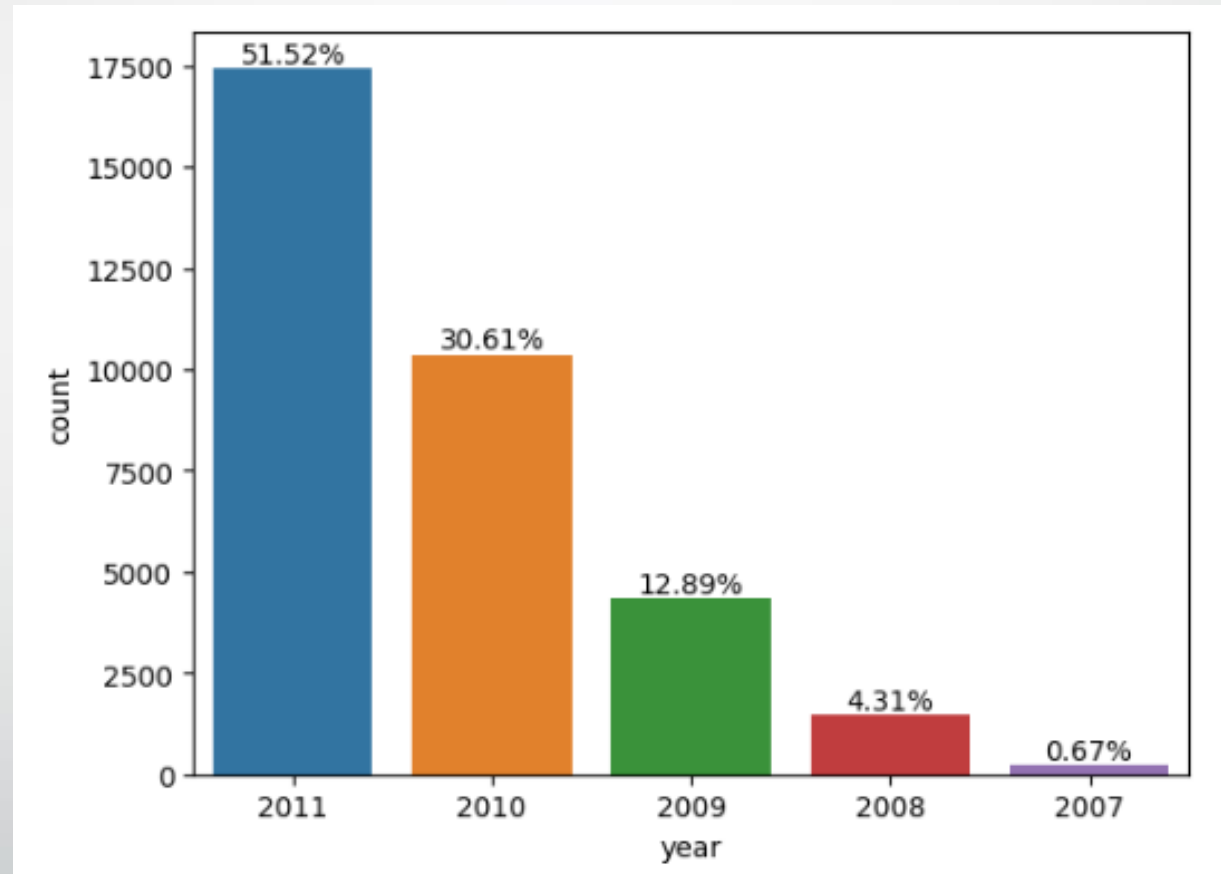
# Time Frame of Data 2007-2011

**75%** Increase In Applicants

In 2011 Compared To 2010

**120%** Increase In Applicants

In 2010 Compared To 2009



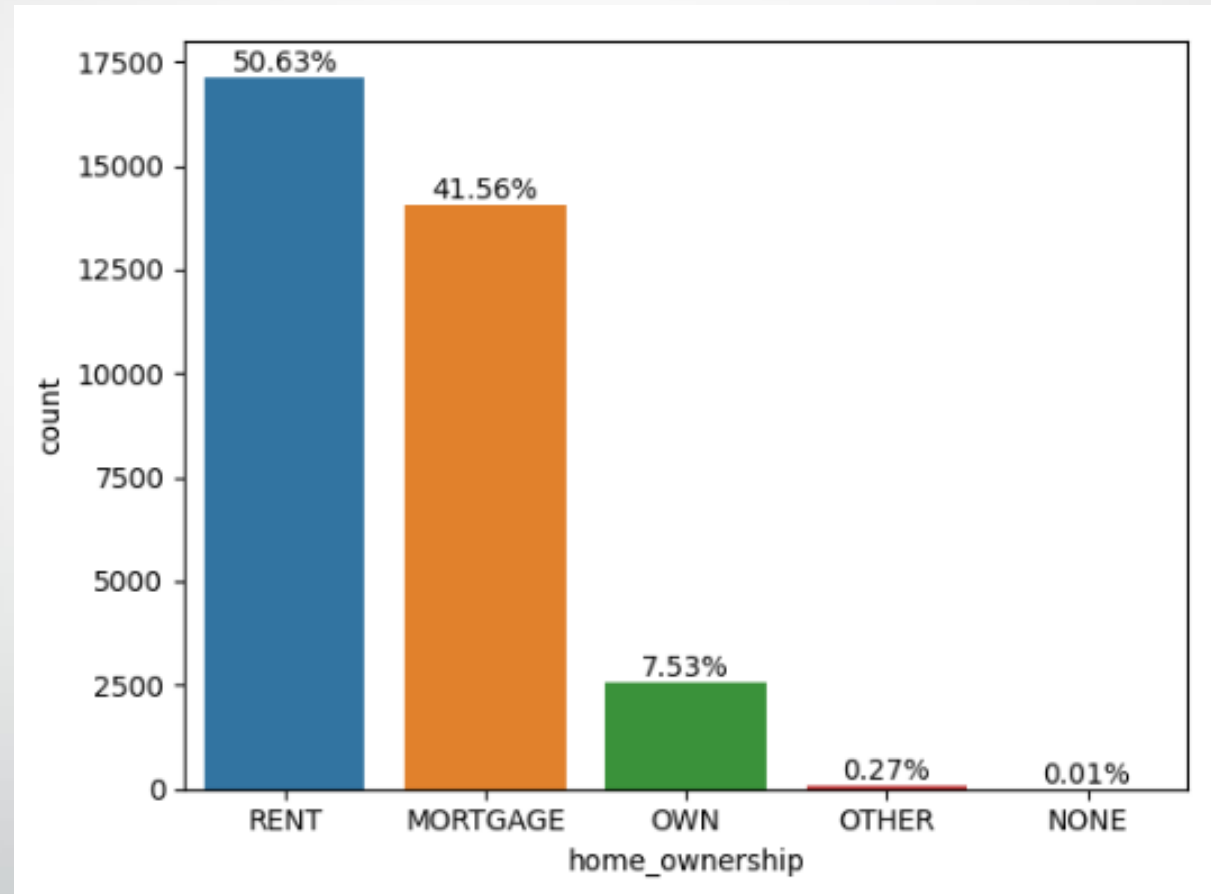
# Home Ownership

**50.63%** Of The Loan

Applicant Lives In Rented  
Home

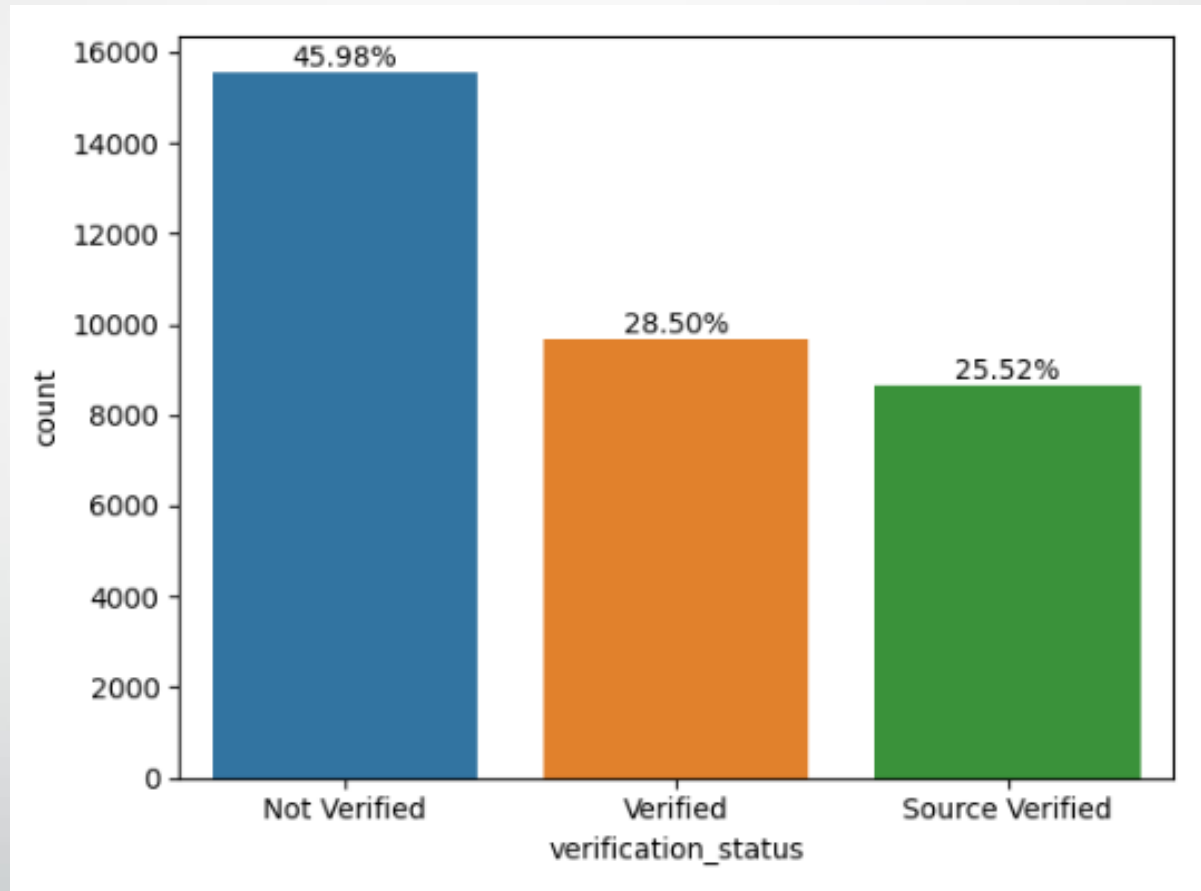
**41.56%** Of The Loan

Applicant Has Mortgaged  
Their Home



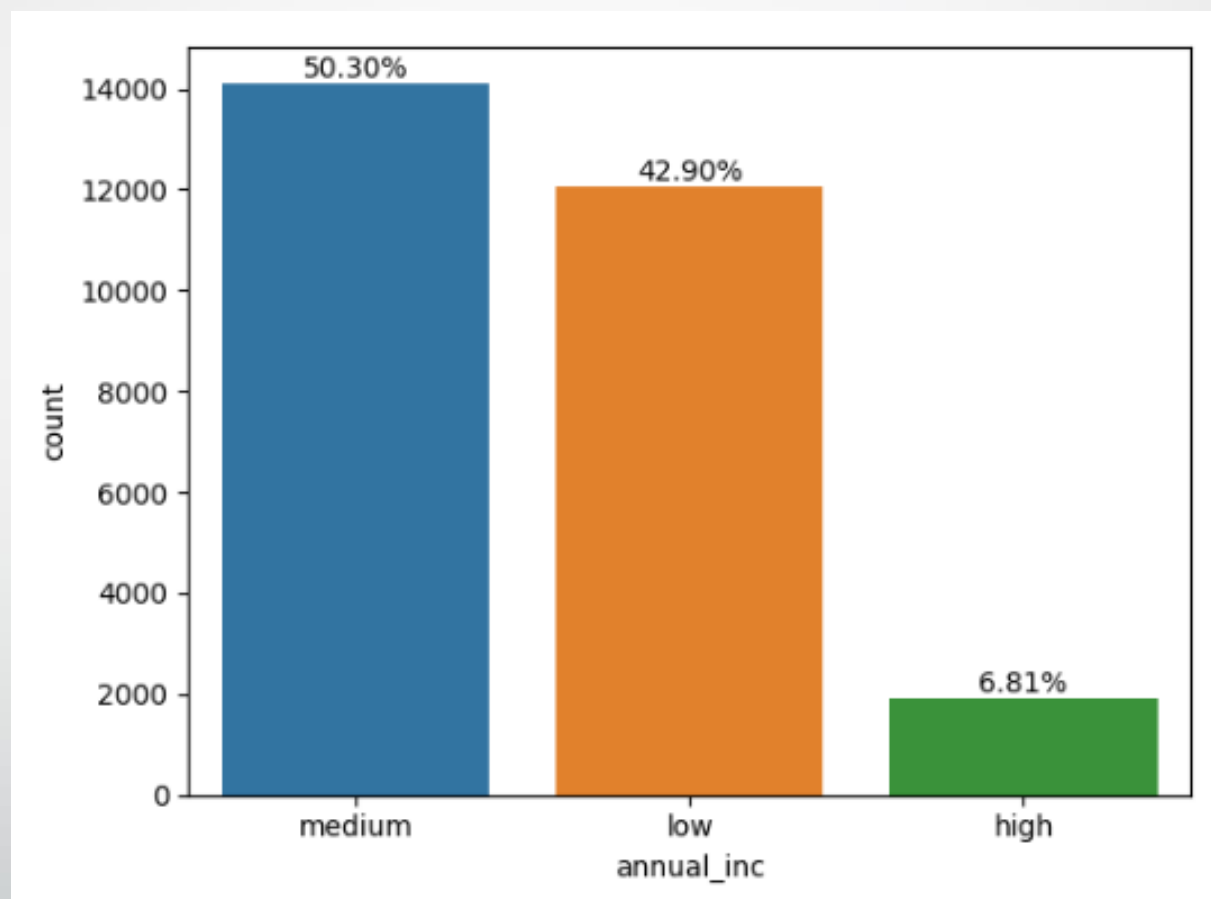
# Loan Applicant Verification

**45.98%** Of The Loan Applicants Are Not Verified



# Loan Applicant's Annual Income

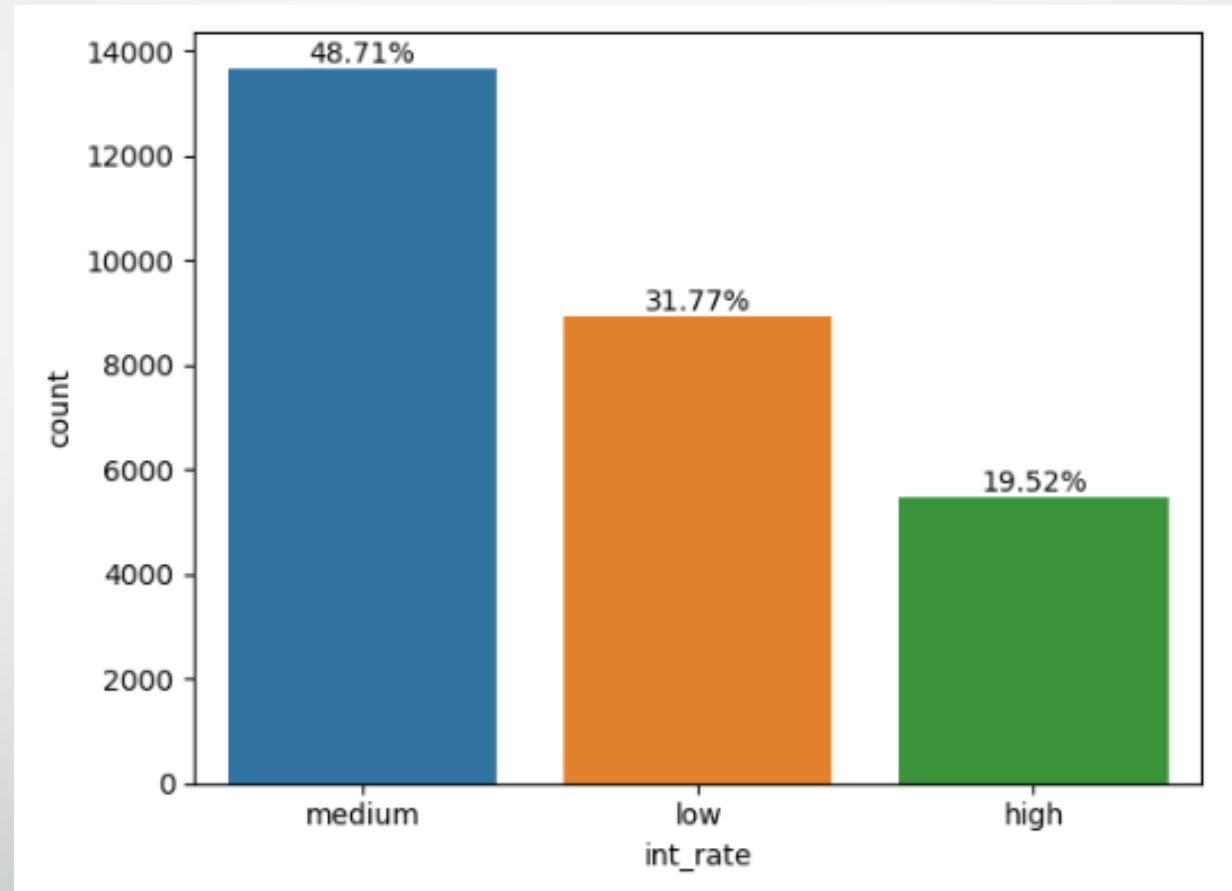
**50.30%** Of The Loan Applicants Have Annual Income In The Range Of 100000 To 150000





# Loan Interest Rate

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



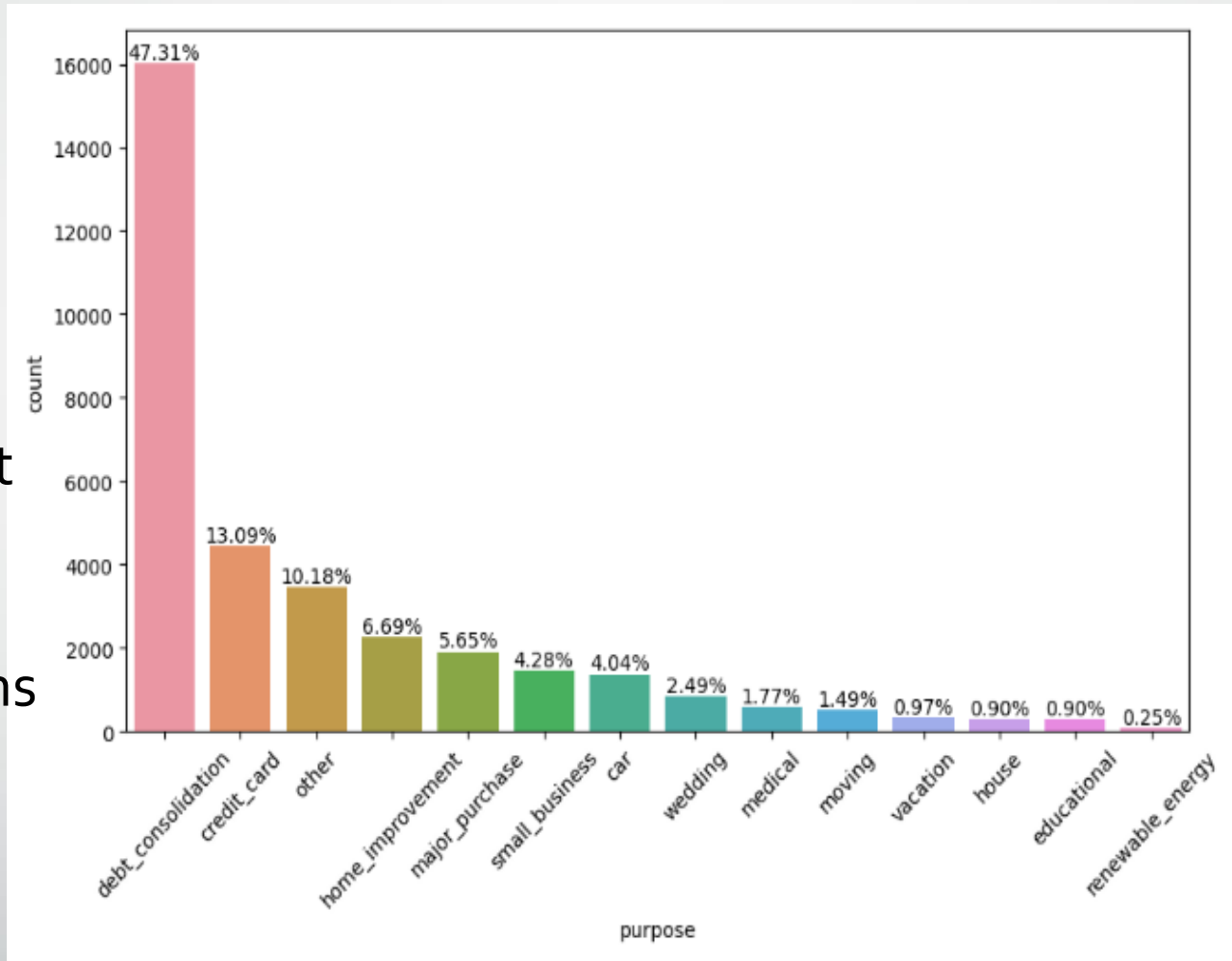
# Loan Purpose Distribution

**47.31%** Debt Consolidation  
Loans

**13.09%** Credit Card Loans

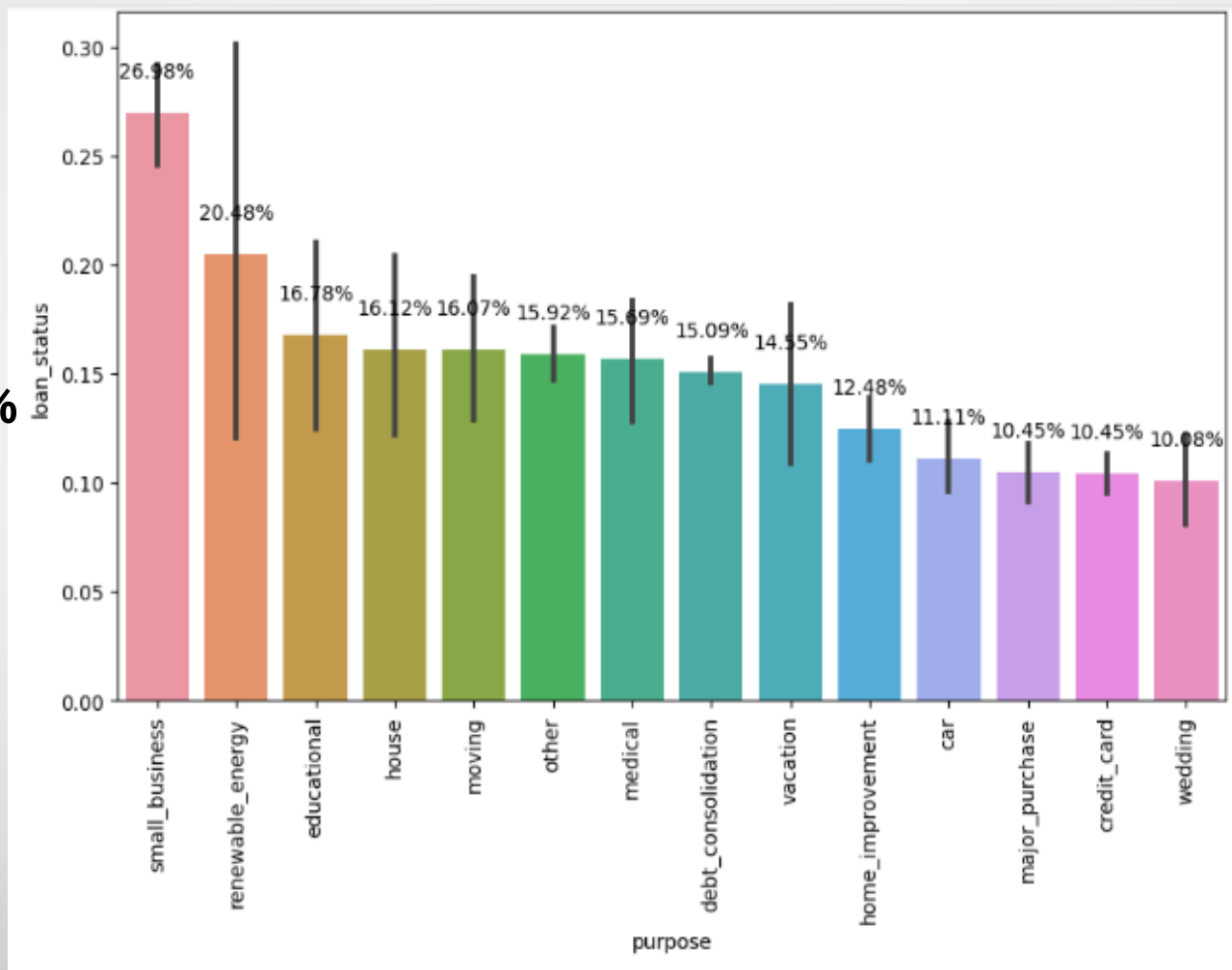
**6.69%** Home Improvement  
Loans

**5.65%** Major Purchase Loans



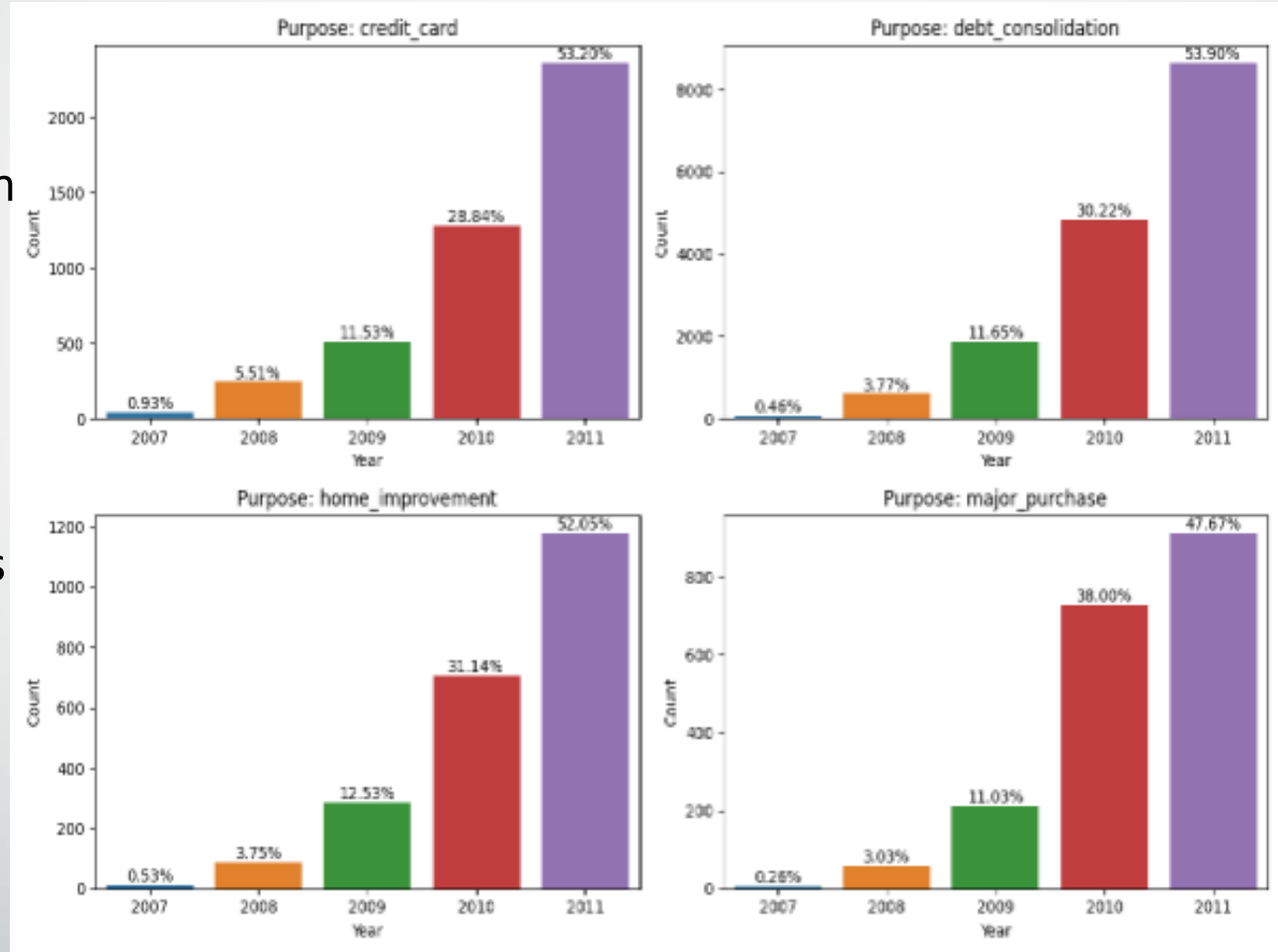
# Default Rate Across Loan Purpose

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



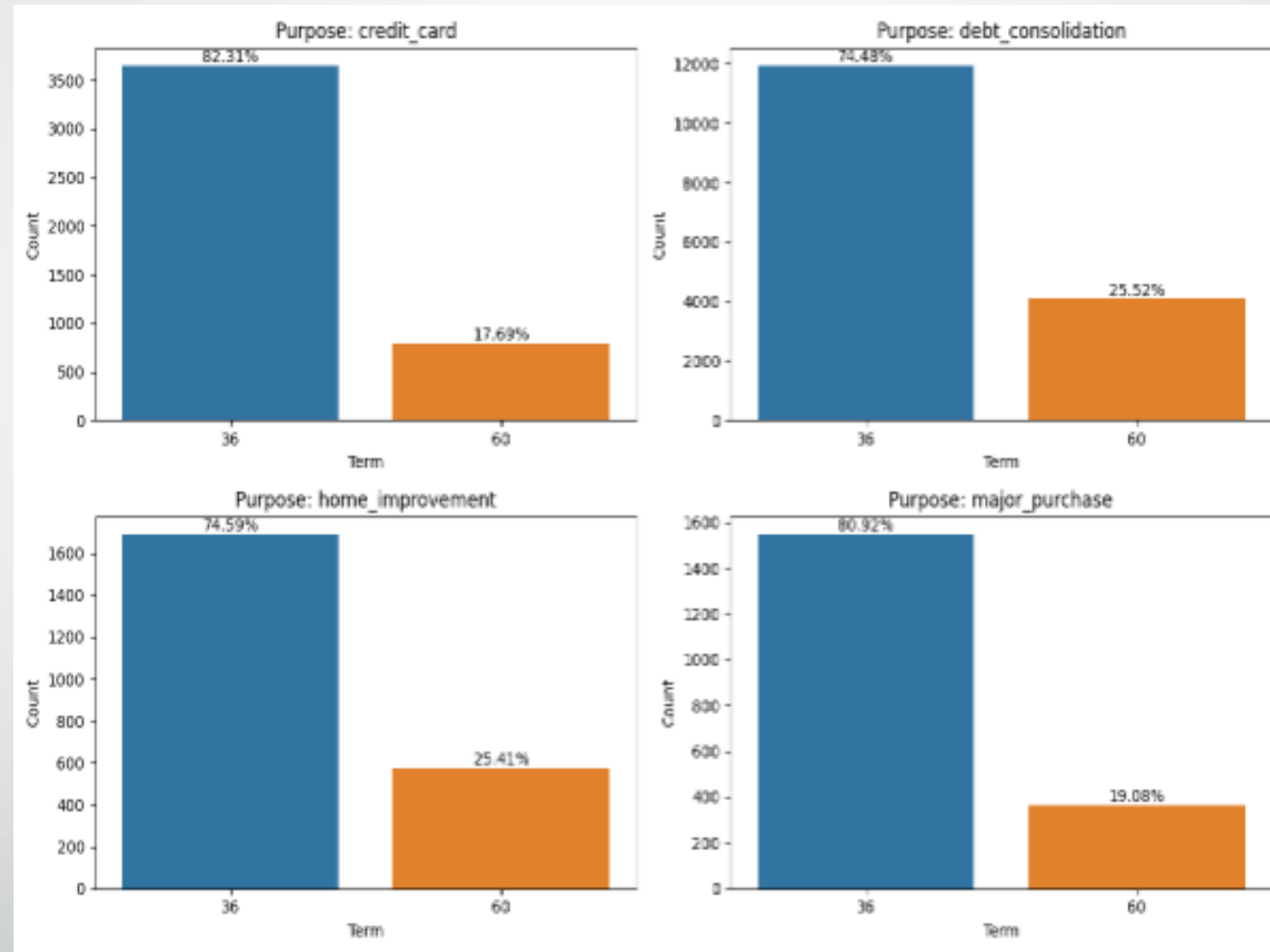
# Top 4 Products Over Time

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

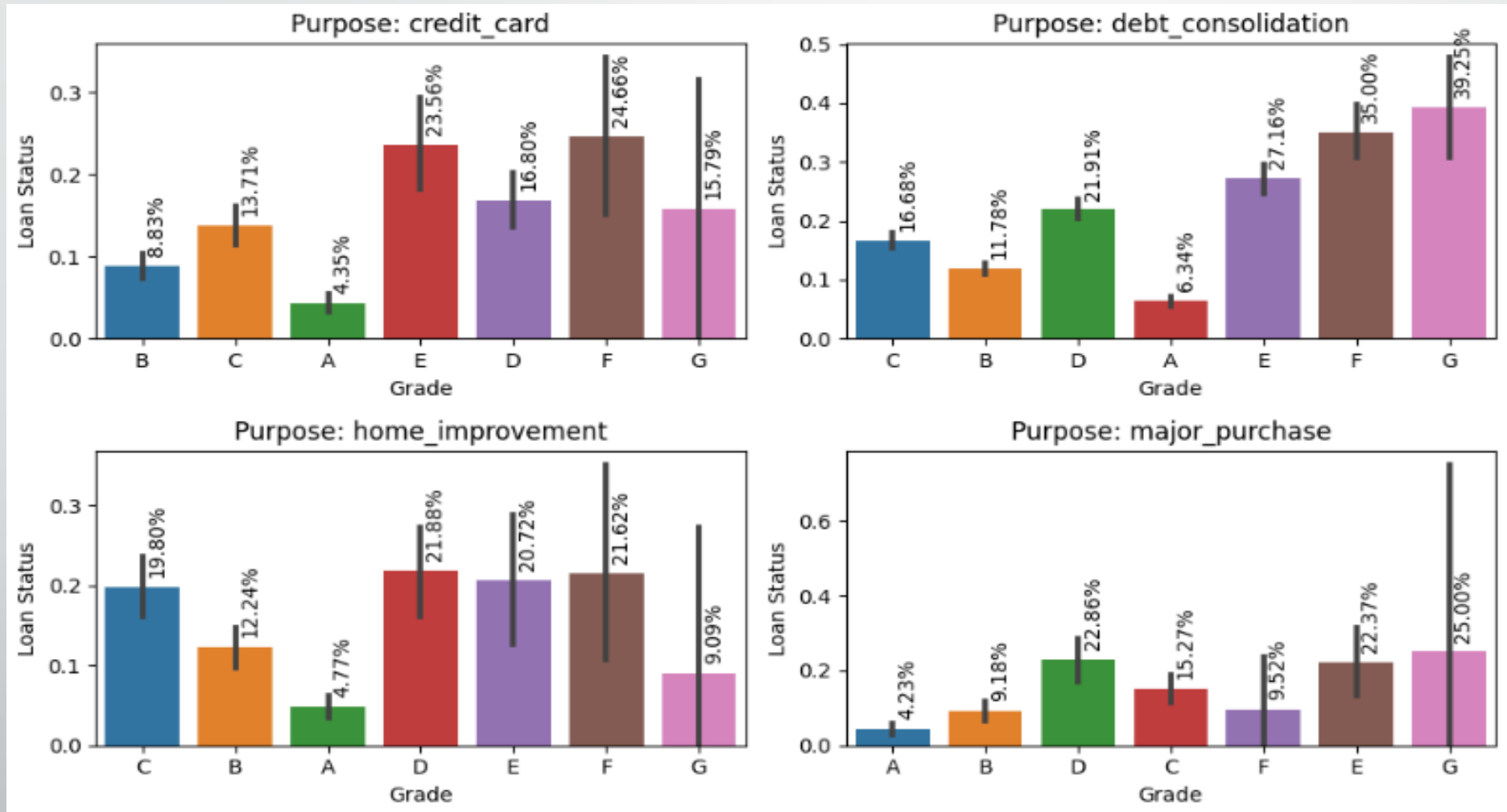


# Term Distribution In Top 4 Products

Across All Products Majorly  
36 Month Term Loan Is Given

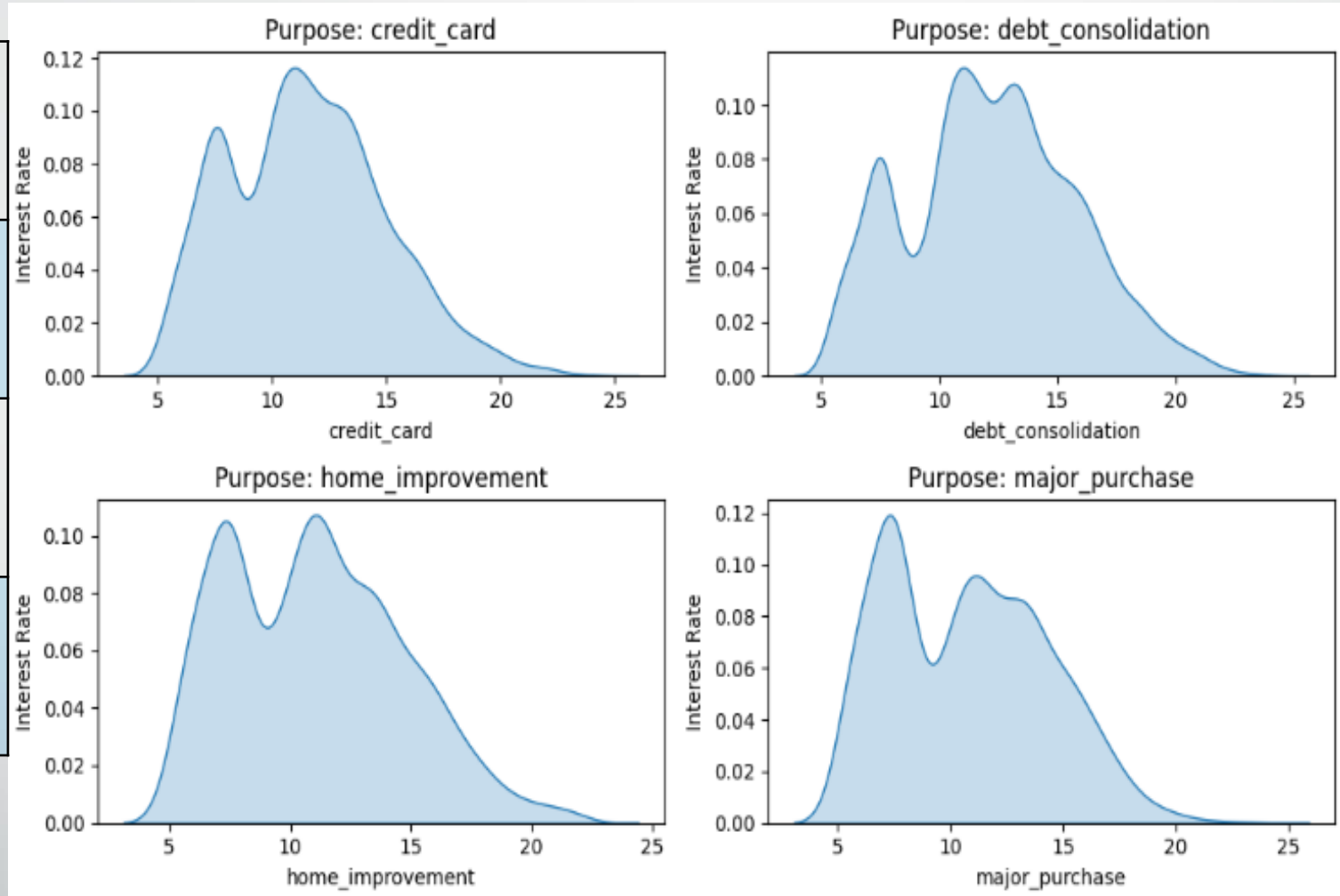


# Grade Distribution In Top 4 Products

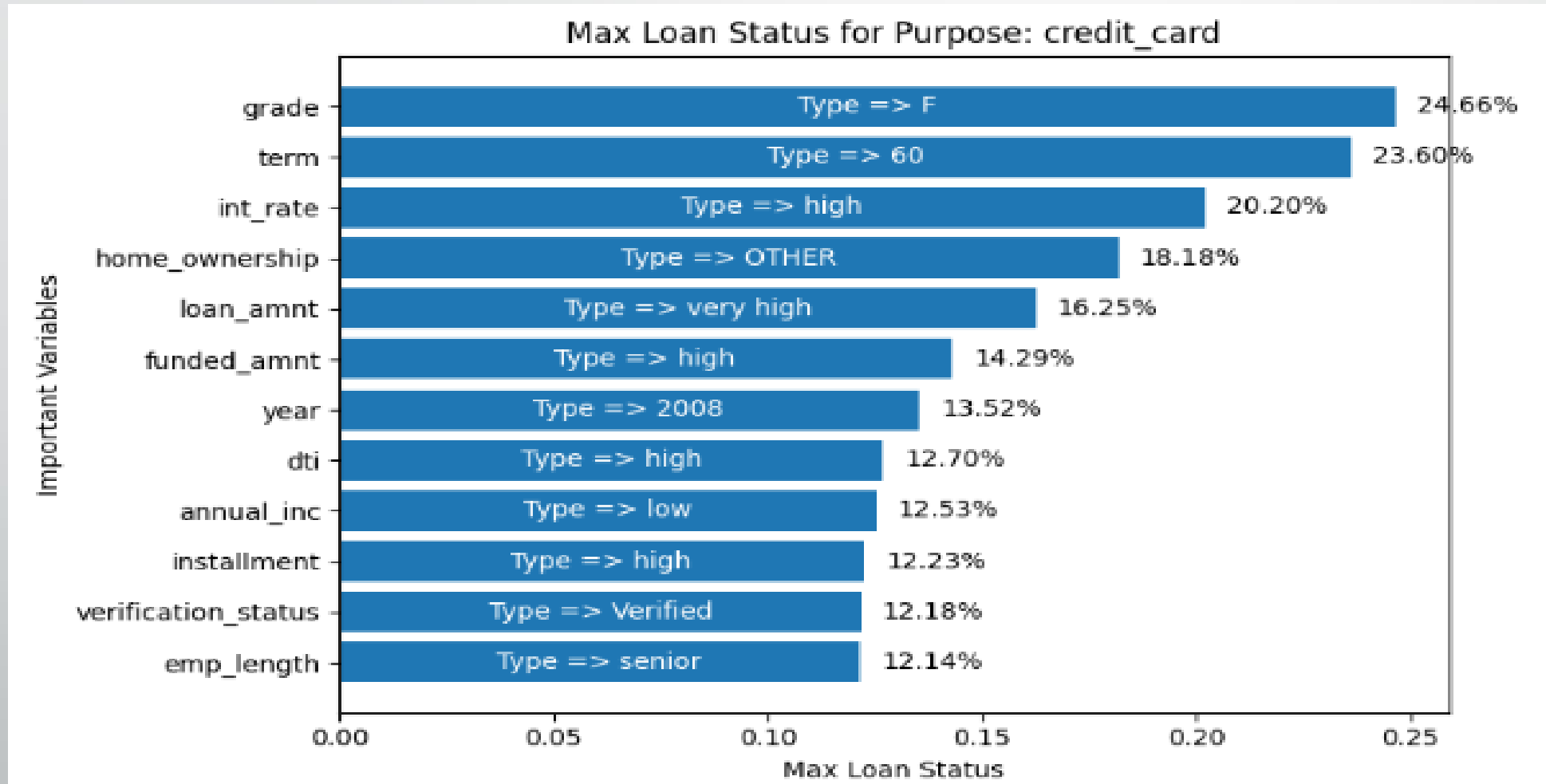


# Interest Rate In Top 4 Products

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

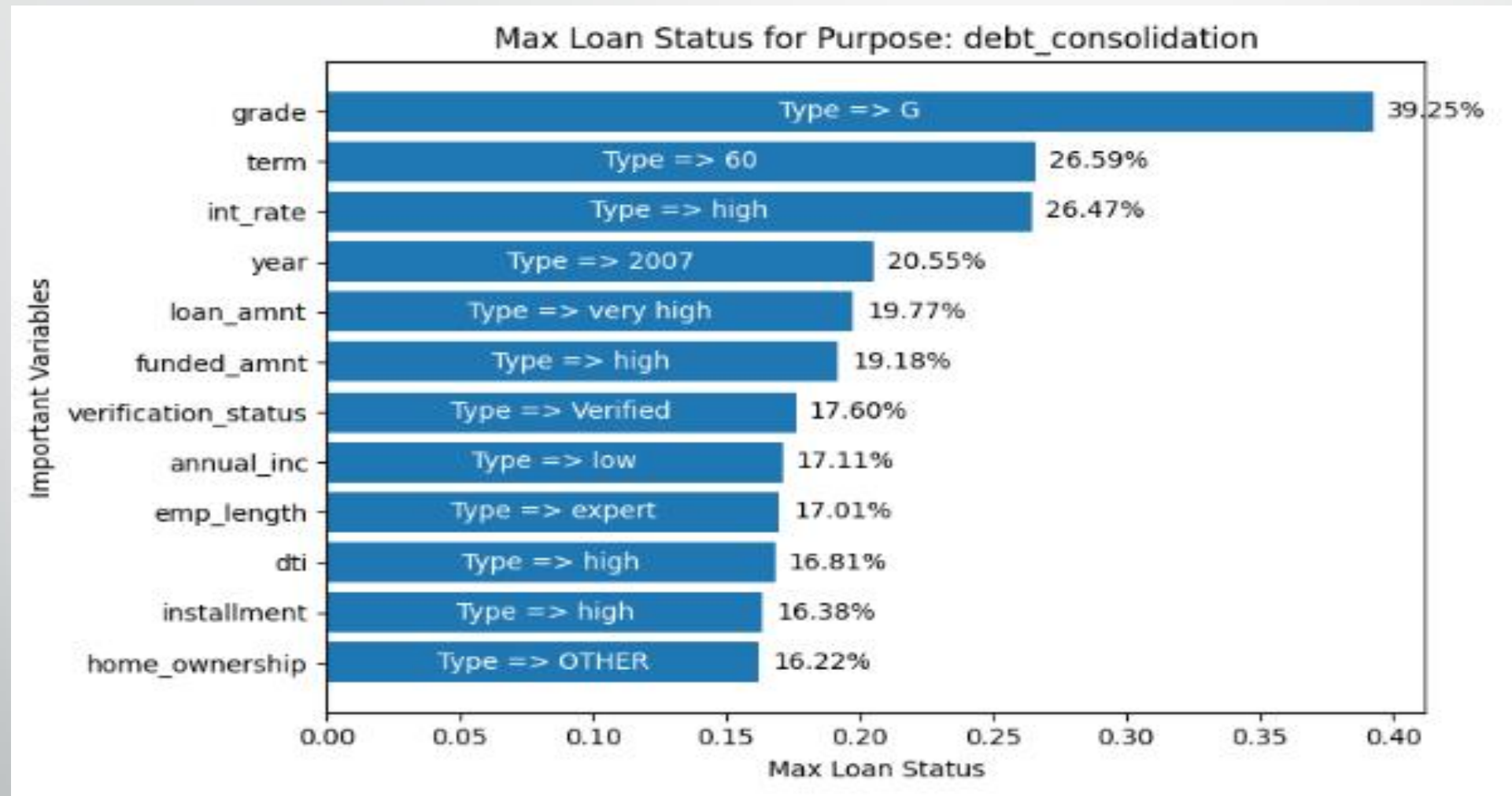


# Important Variable : Credit Card

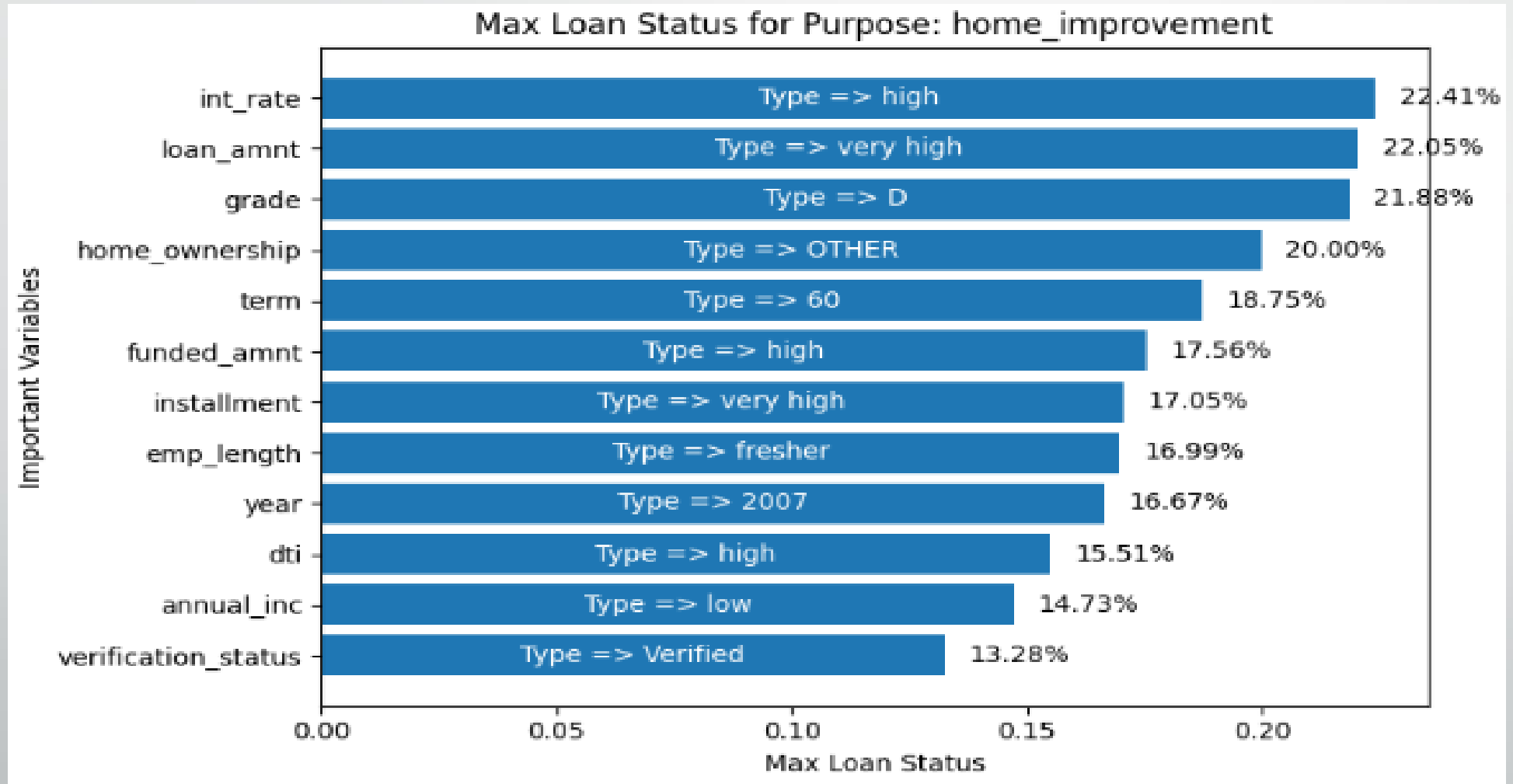




# Important Variable : Debt Consolidation



# Important Variable : Home Improvement



# Important Variable :Major Purchase

