BFSI Credit Score – Case Study

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NOTE:

•All the analysis has been done on the test set after prediction to recognise the customers who might have a 'Poor' credit score.

•Although there were three credit scores in the original dataset ('Poor', 'Standard', and 'Good') for analysis, the credit scores have been divided into two categories, i.e., 'Poor' and 'Good and Above'. This has been done to simplify the model and to efficiently recognise the customers who might have 'Poor' credit score.
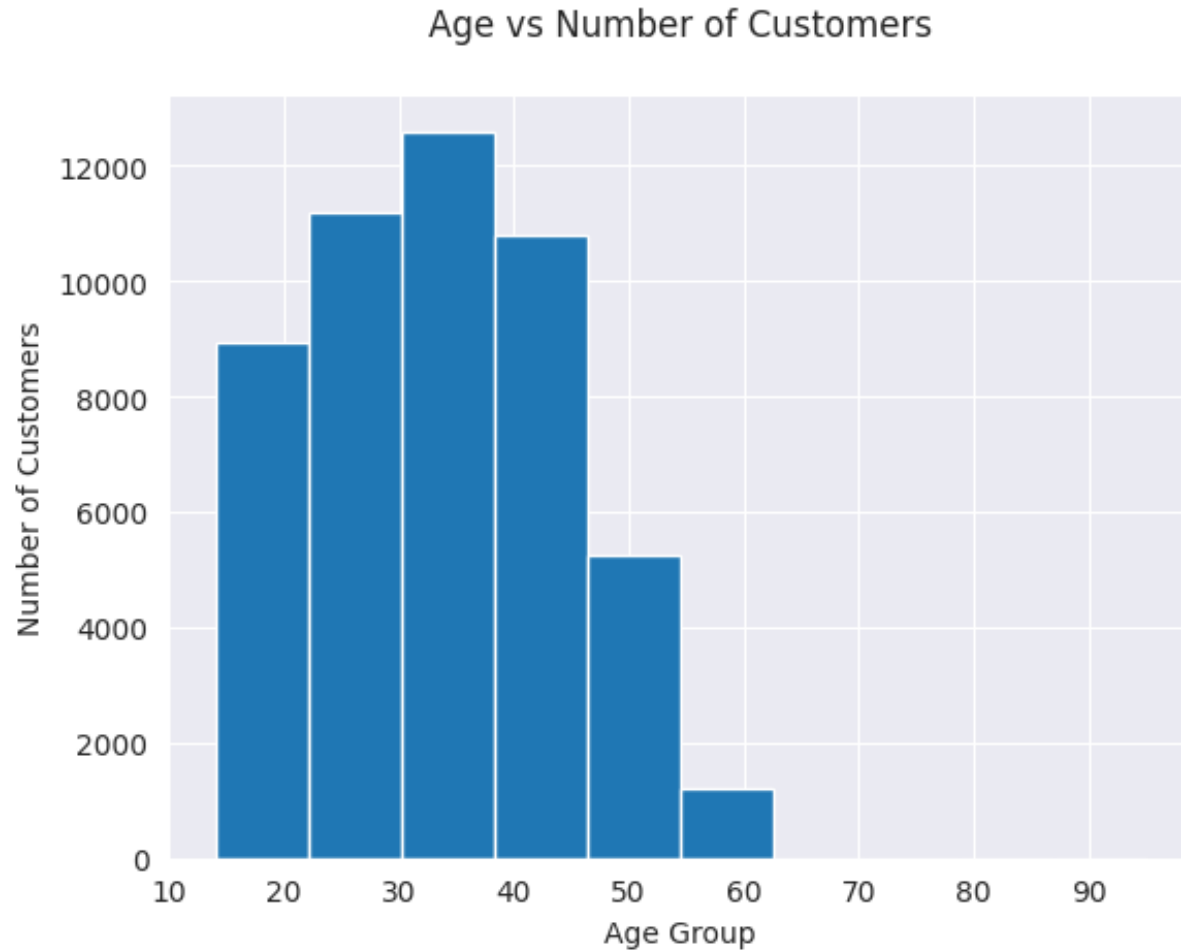
ANALYSIS

CREDIT SCORE VS NUMBER OF CUSTOMERS

Credit Score vs Number of Customers

Observation:

In the test data set, it has been predicted that about **32%** (**16,019**) of the customers will have '**Poor**' credit score and about **68%** (**33,981**) of the customers will have '**Good and Above**' credit score.
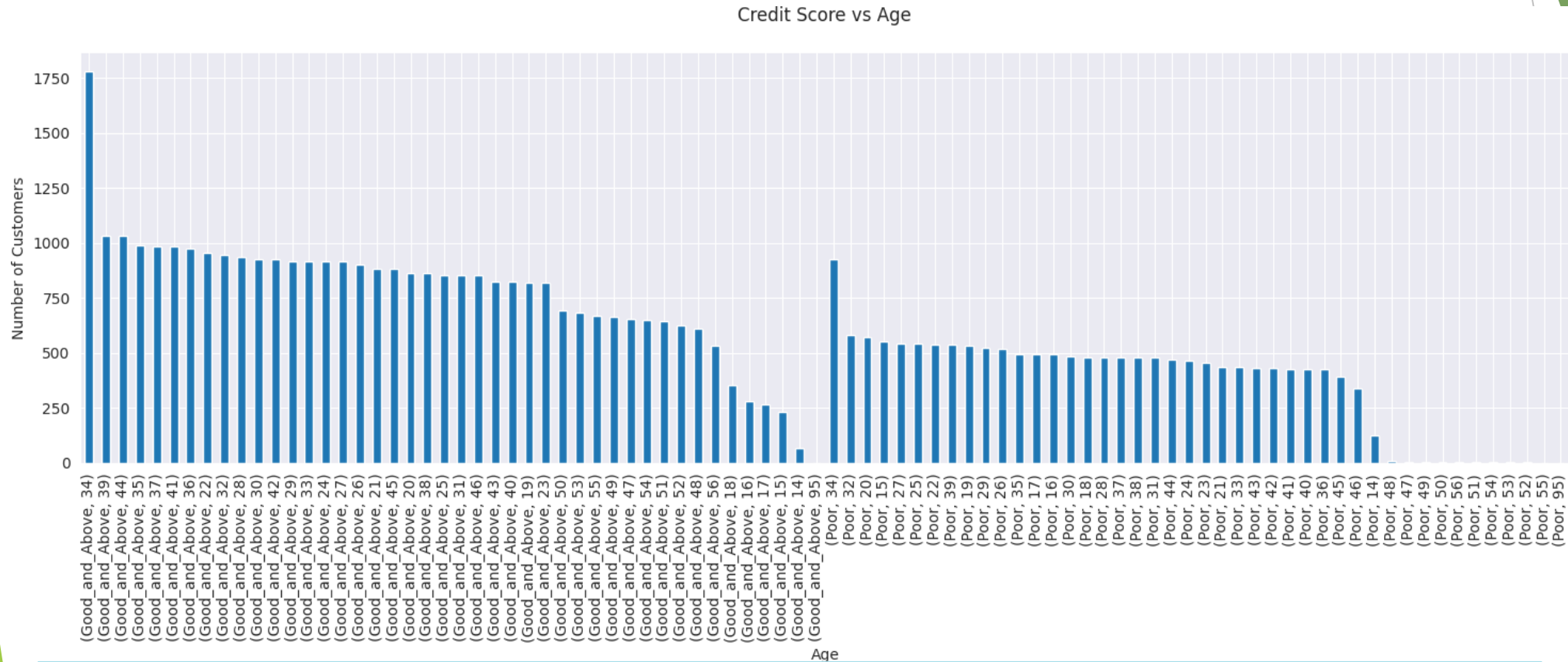
AGE VS NUMBER OF CUSTOMERS


Age vs Number of Customers

Observation:
In the test data set, the highest number of customers belong to the 30 to 40-year age group, followed by 20 to 30 years and 40 to 50 years.
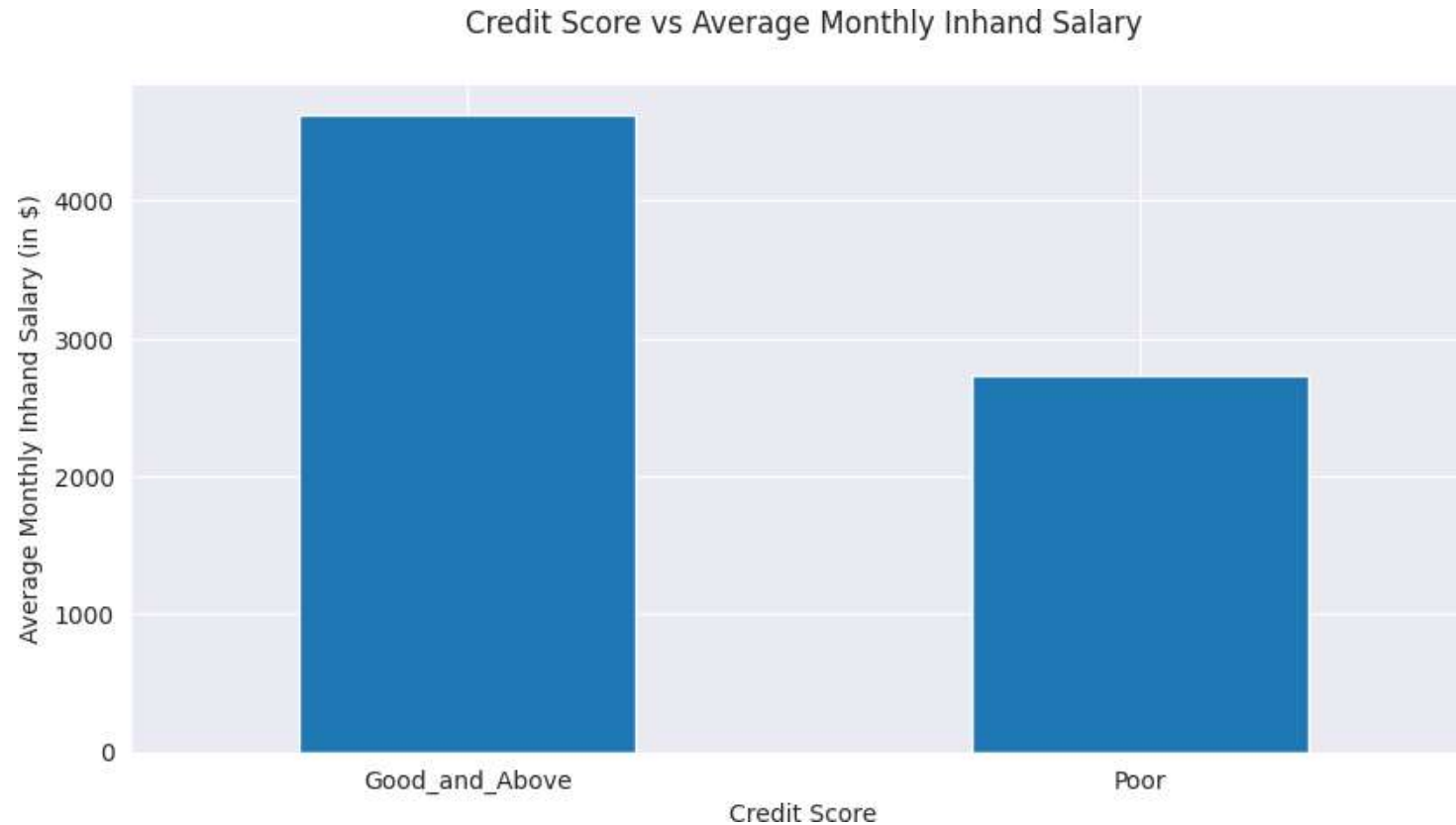
CREDIT SCORE VS AGE

Credit Score vs Age

Observation: The age group having both 'Poor' and 'Good and Above' credit score in the test set is **34 years**.

CREDIT SCORE VS AVERAGE ANNUAL INCOME

Credit Score vs Average Annual Income
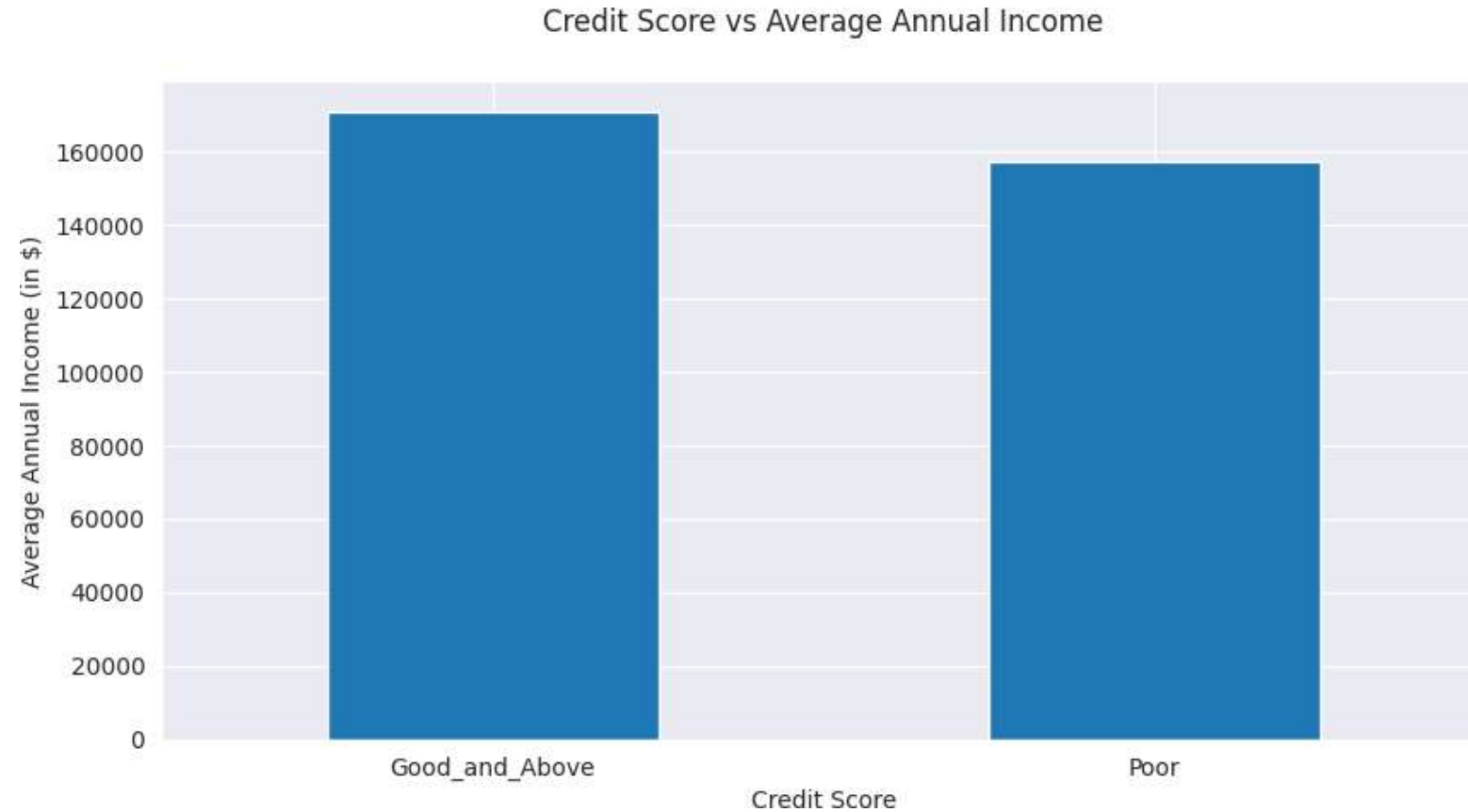
Observation: The difference between the average annual incomes of customers having either 'Poor' or 'Good and Above' credit scores is not significant.

CREDIT SCORE VS AVERAGE MONTHLY INHAND SALARY

Credit Score vs Average Monthly Inhand Salary

Observation: Average Monthly Inhand Salary of Customers with a Poor' Credit Score is approximately USD 2,700, which is almost half of the Average Monthly Inhand Salary of Customers with 'Good and Above' Credit Score.

CREDIT SCORE VS AVERAGE DELAY FROM DUE DATE
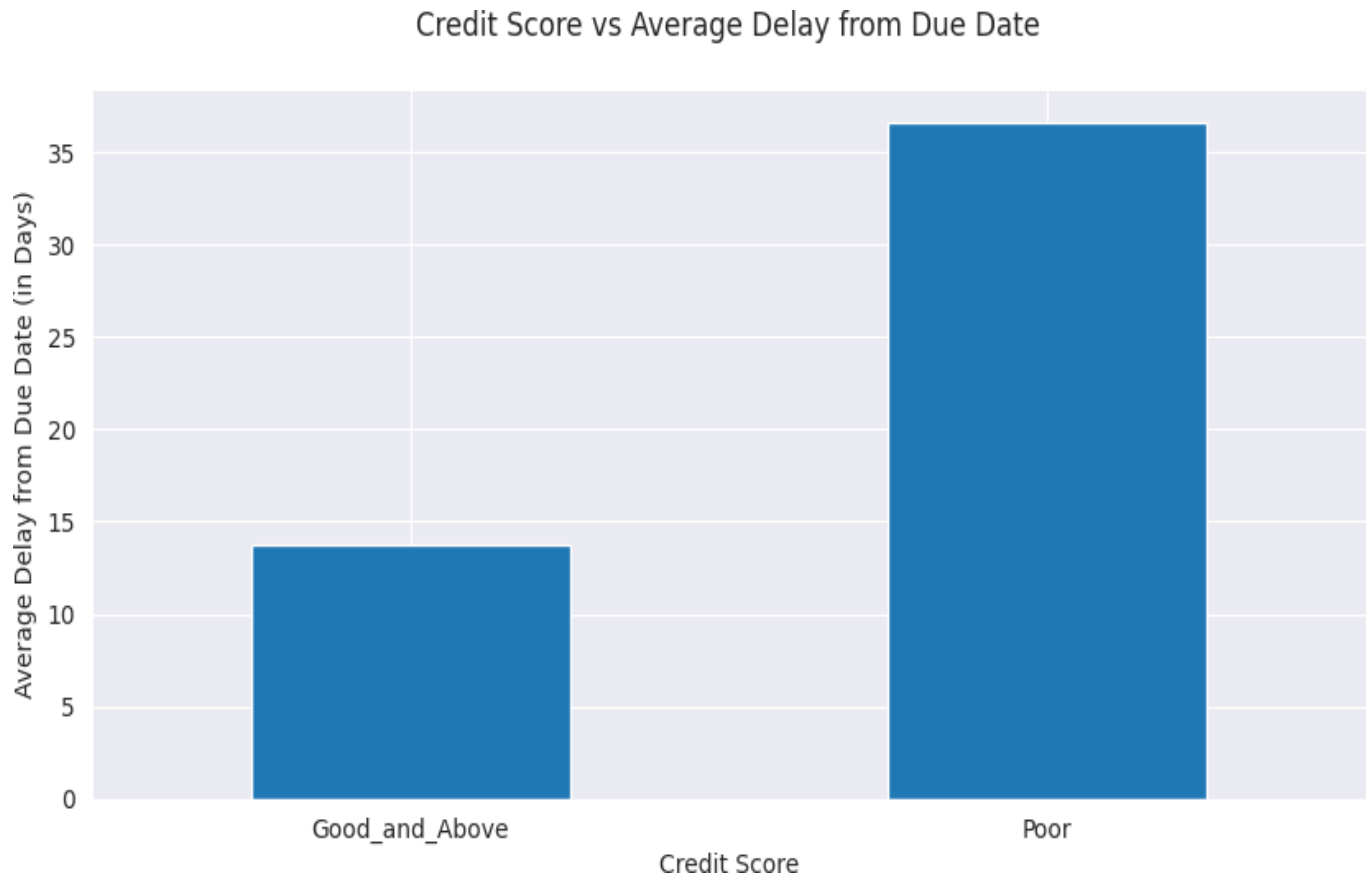
Credit Score vs Average Delay from Due Date

Observation:

While the average number of days delayed from the due date for customers with a 'Good and Above' credit score is 14, the average number of days delayed from the due date for customers with a 'Poor' credit score is more than 35, which is more than double that of customers with a 'Good and Above' credit score.

CREDIT SCORE VS NUMBER OF DELAYED PAYMENTS
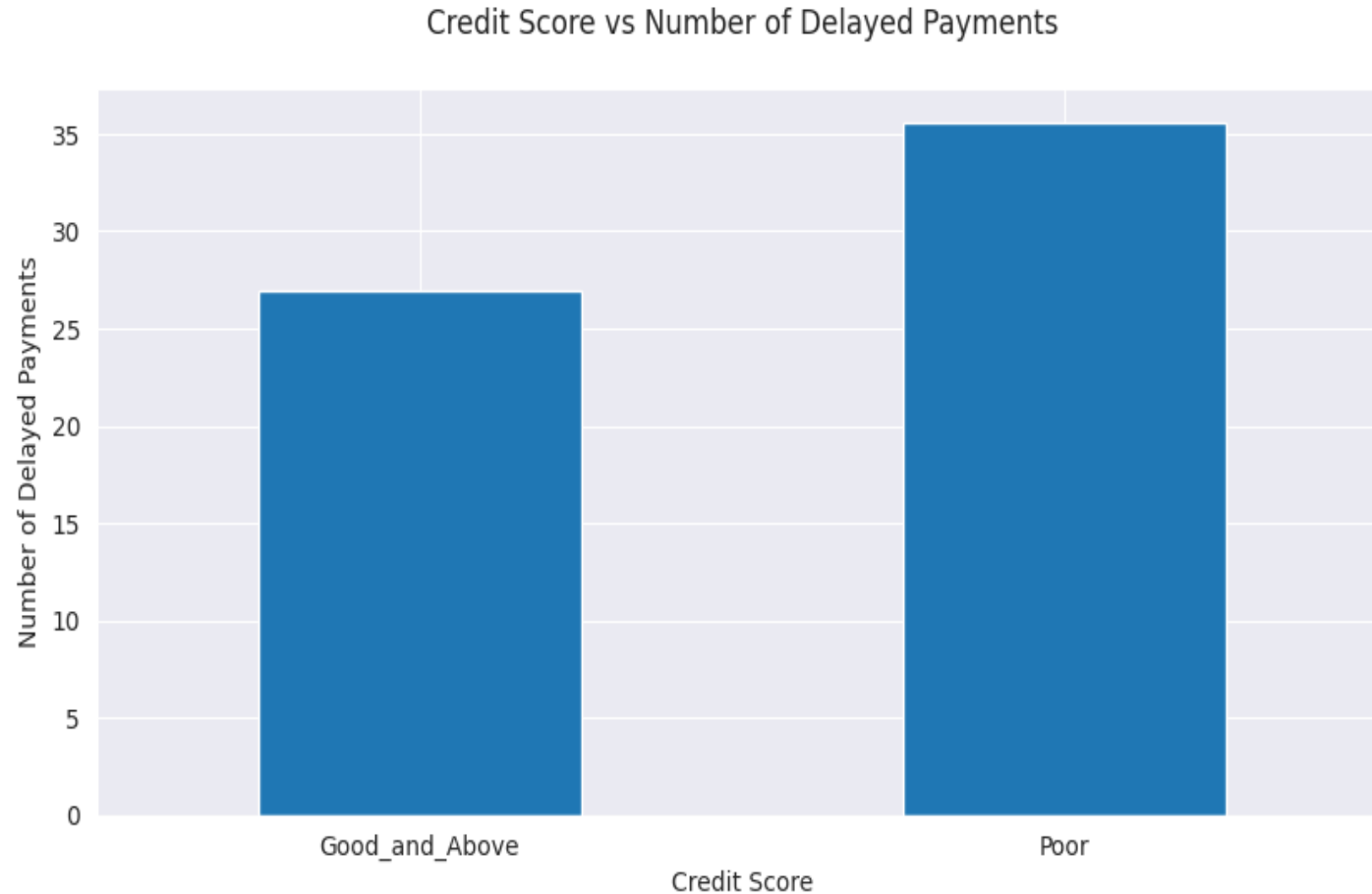
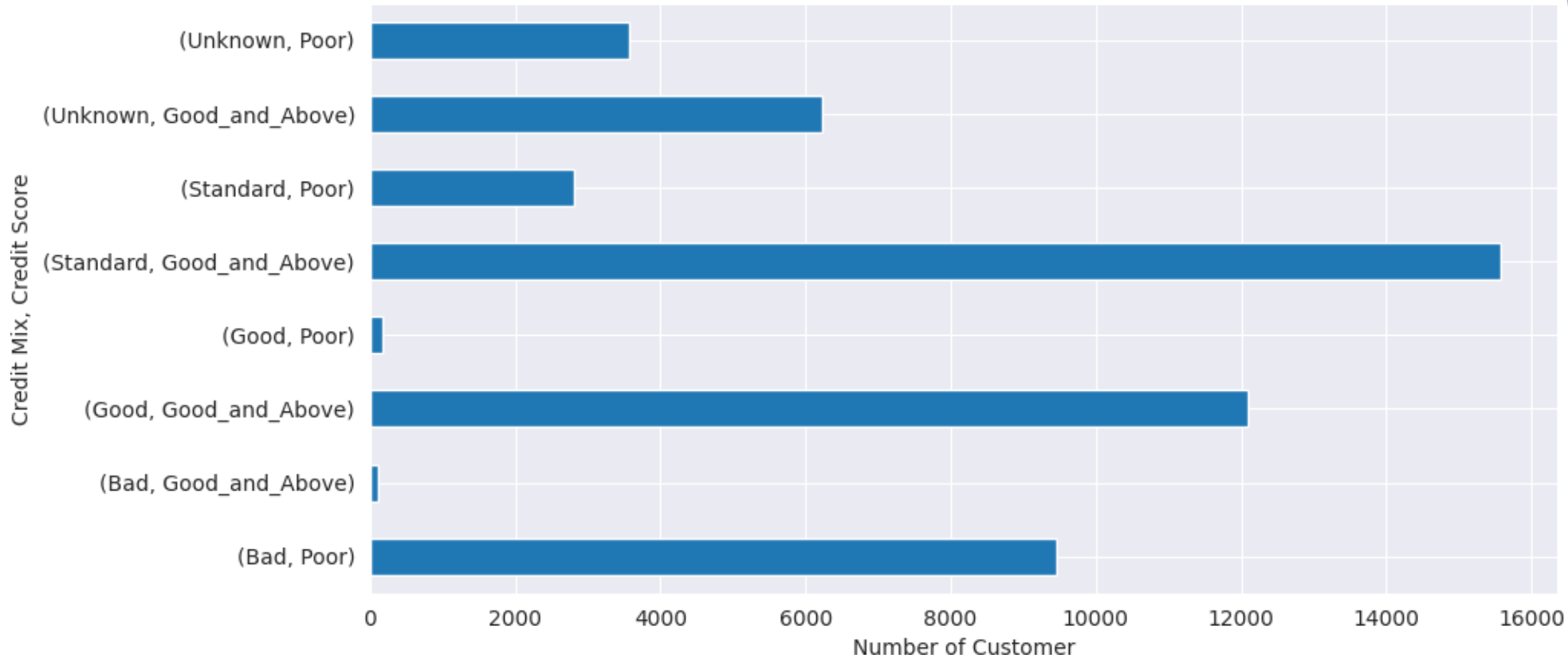Credit Score vs Number of Delayed Payments

Observation:
While the average number of delayed payments for customers with a 'Good and Above' credit score is ~25, the average number of delayed payments for customers with a 'Poor' credit score is ~35,
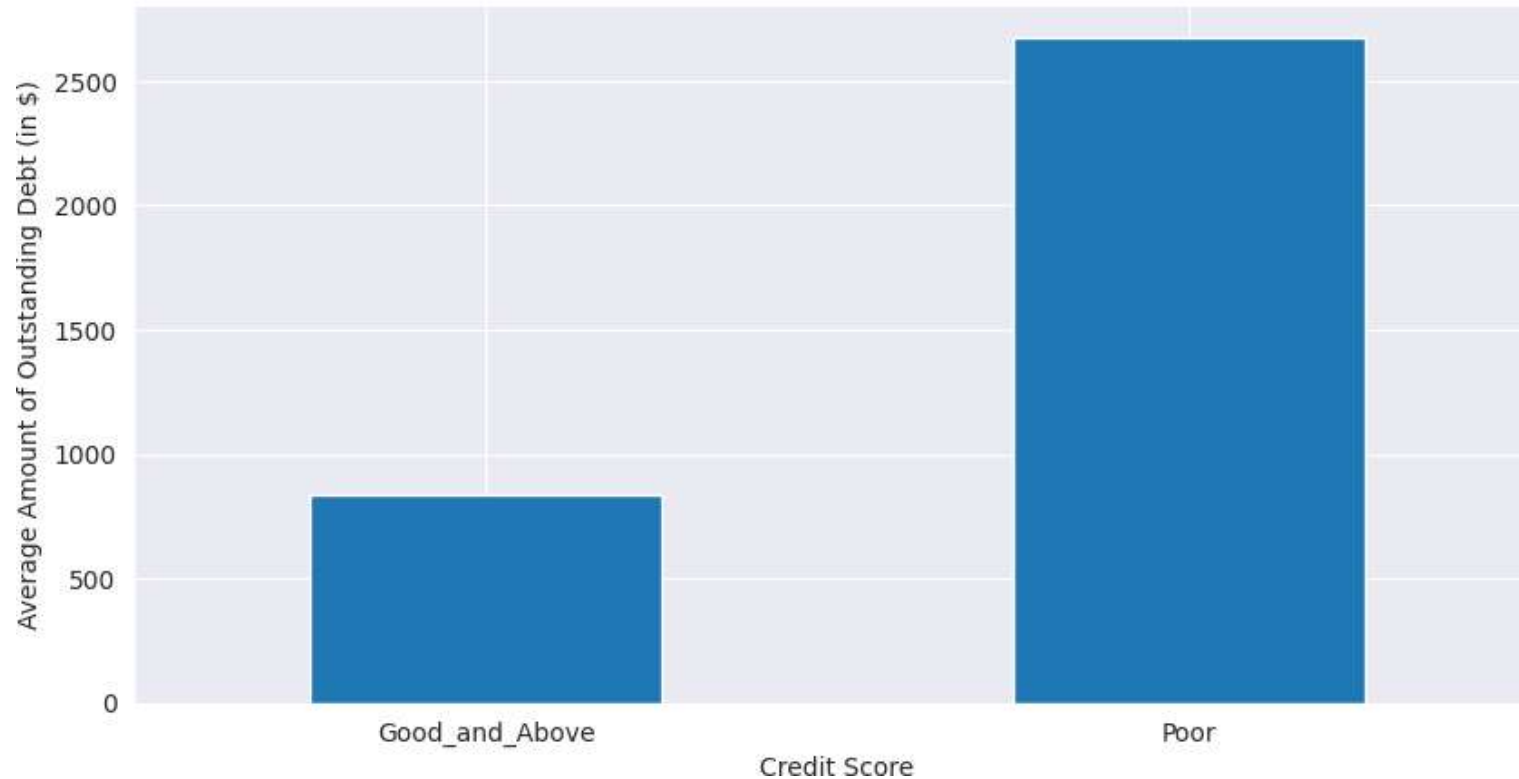
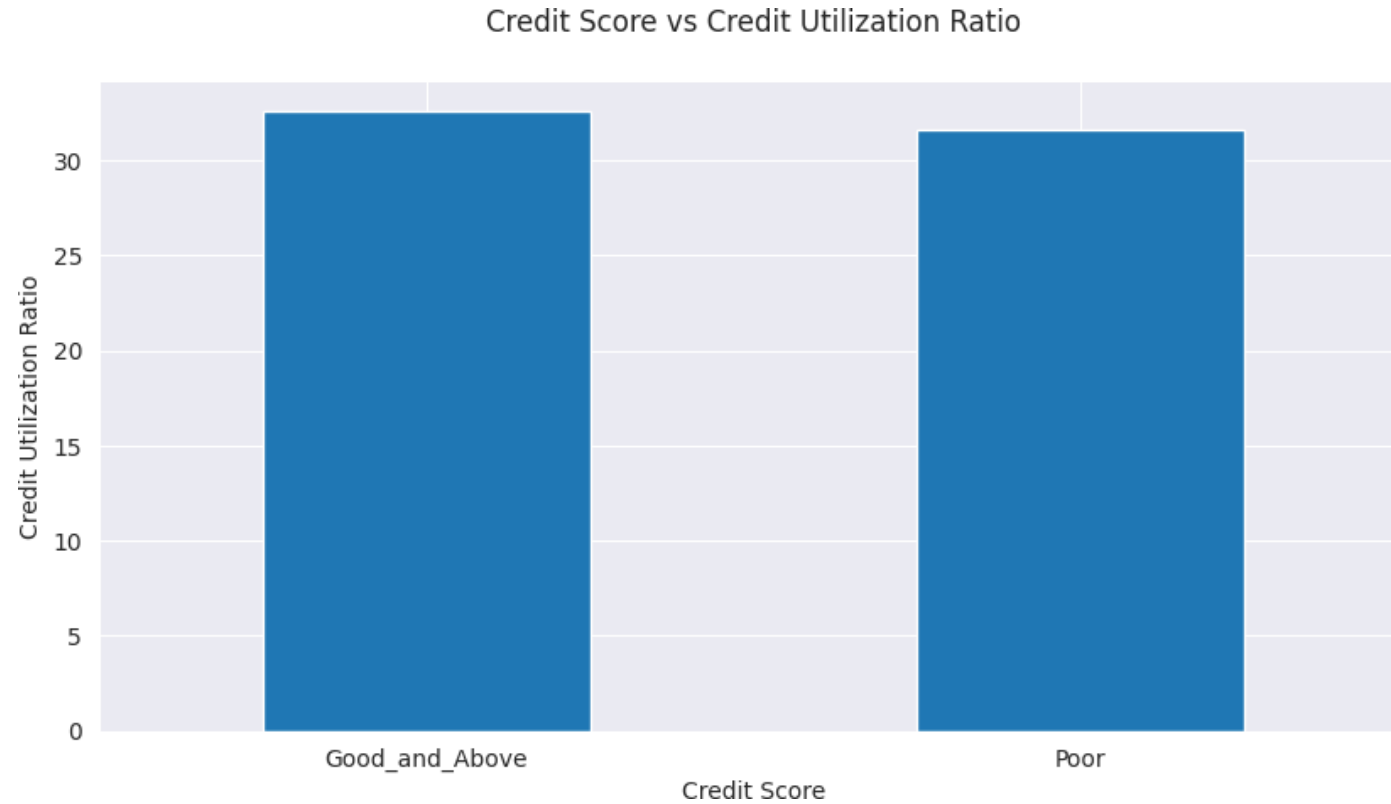# CREDIT SCORE VS CREDIT MIX

Credit Score vs Credit Mix

Observation: The highest number of customers with a 'Poor' credit score have a 'Bad' credit mix, followed by 'Unknown' and 'Standard'.

CREDIT SCORE VS OUTSTANDING DEBT

Credit Score vs Outstanding Debt

Observation: Customers with a 'Poor' credit score have a significantly higher average outstanding debt (more than USD 2,500) as compared to customers with a 'Good and Above' credit score (~ USD 750).

CREDIT SCORE VS CREDIT UTILIZATION RATIO

Credit Score vs Credit Utilization Ratio

Observation: The difference between the Average Credit Utilization Ratio of customers having either a 'Poor' or a 'Good and Above' credit scores is not significant.
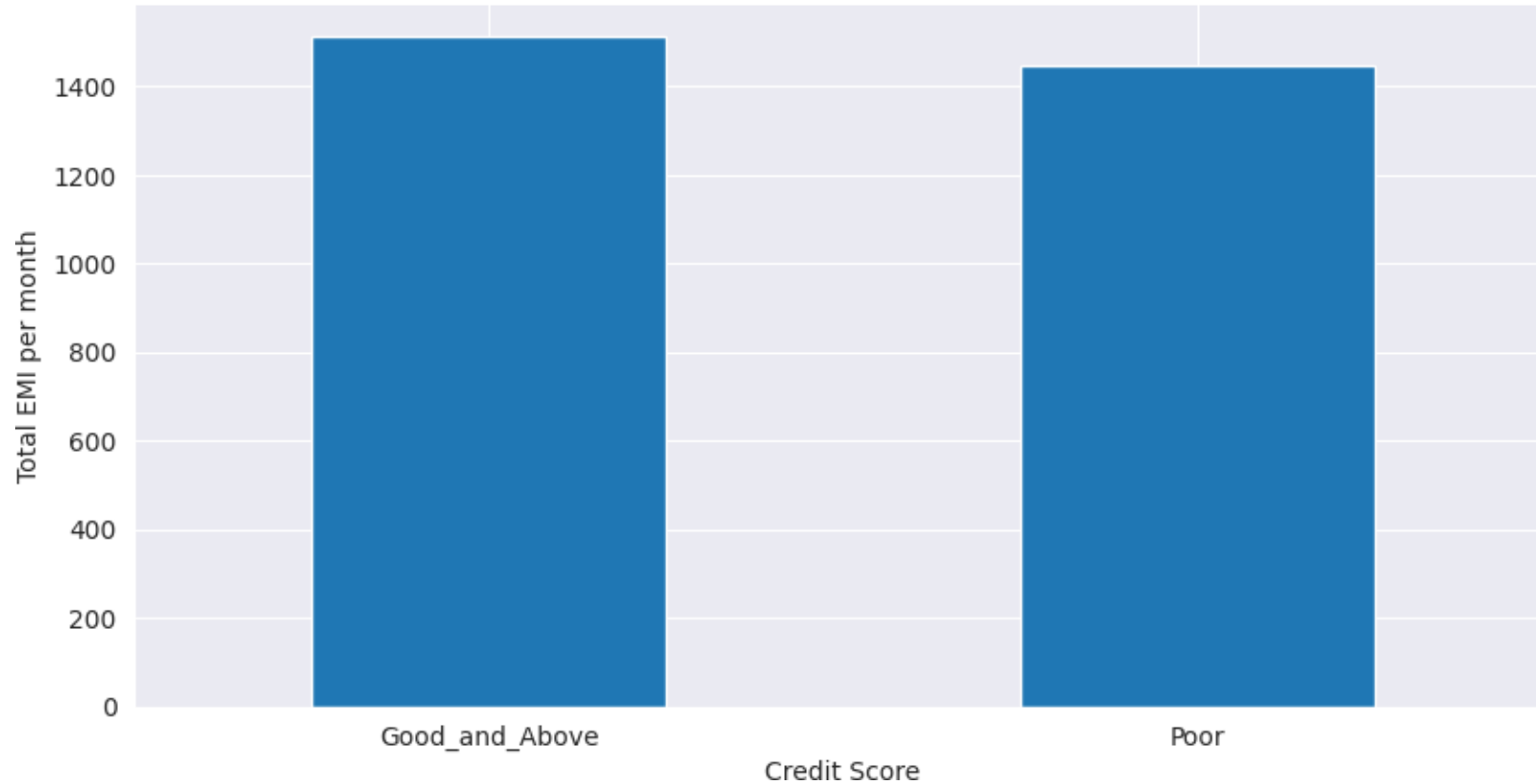
CREDIT SCORE VS PAYMENT OF MINIMUM AMOUNT

Credit Score vs Payment of Minimum Amount
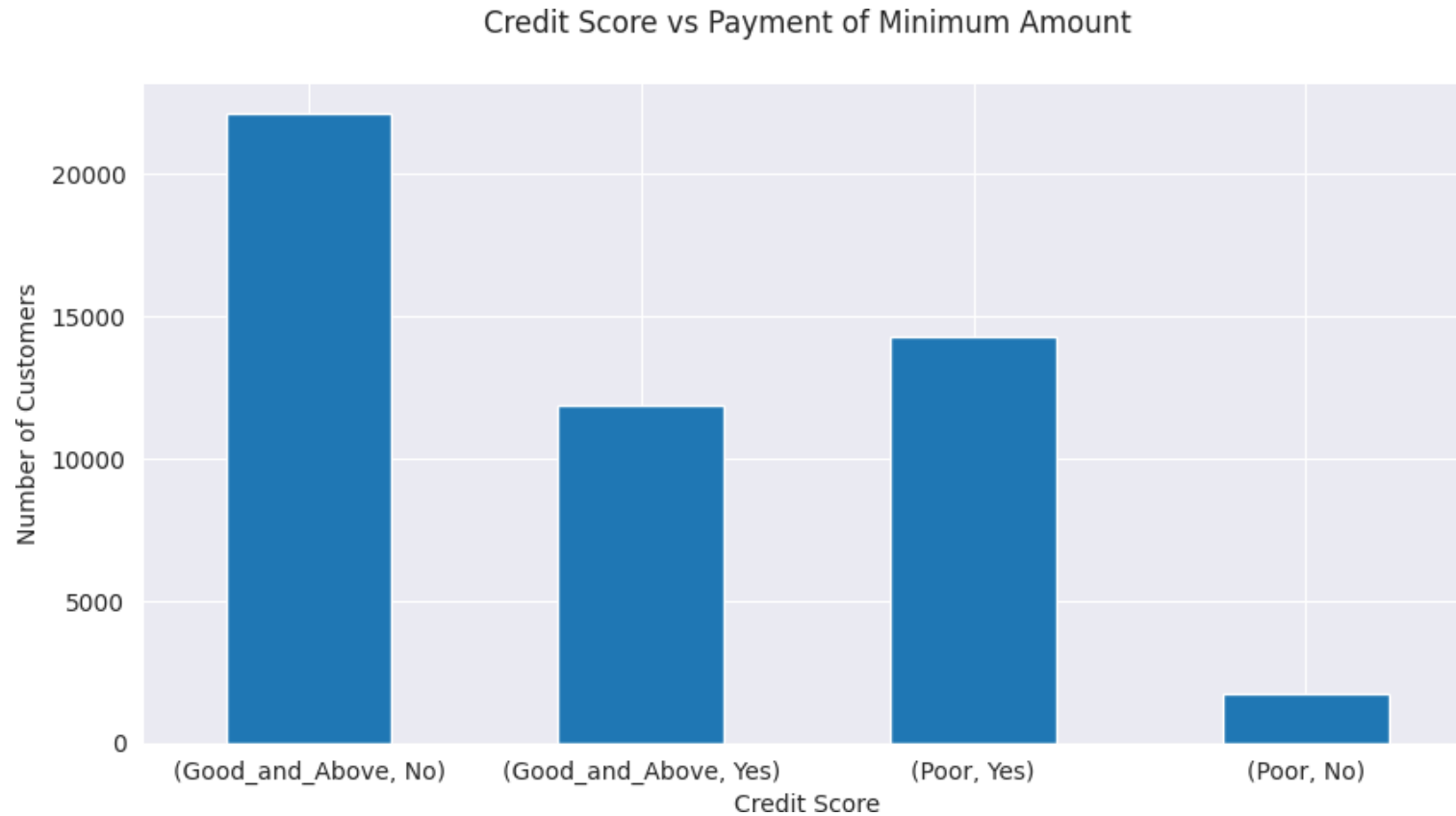
Observation: The number of customers with a 'Poor' credit score paying only the minimum amount is higher than customers having a 'Good and Above' credit score.
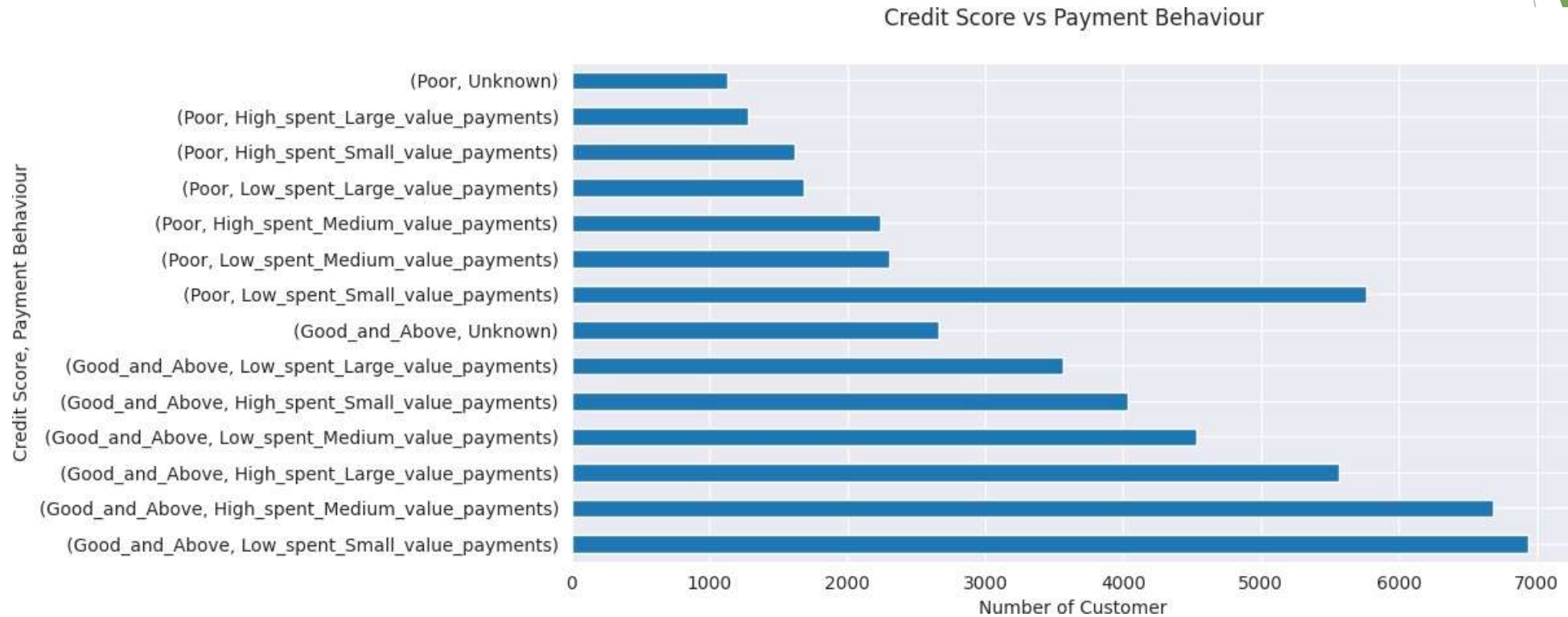
CREDIT SCORE VS TOTAL EMI PER MONTH


Credit Score vs Total EMI per month (in $)

Observation: The difference between the Average Total EMI per month of customers having either a 'Poor' or a 'Good and Above' credit scores is not significant.

CREDIT SCORE VS PAYMENT BEHAVIOUR

Credit Score vs Payment Behaviour

Observation: A high number of customers with a 'Poor' credit score tend to have 'Low Spent Small Value Payments' as their Payment Behaviour.

CREDIT SCORE VS MONTHLY BALANCE
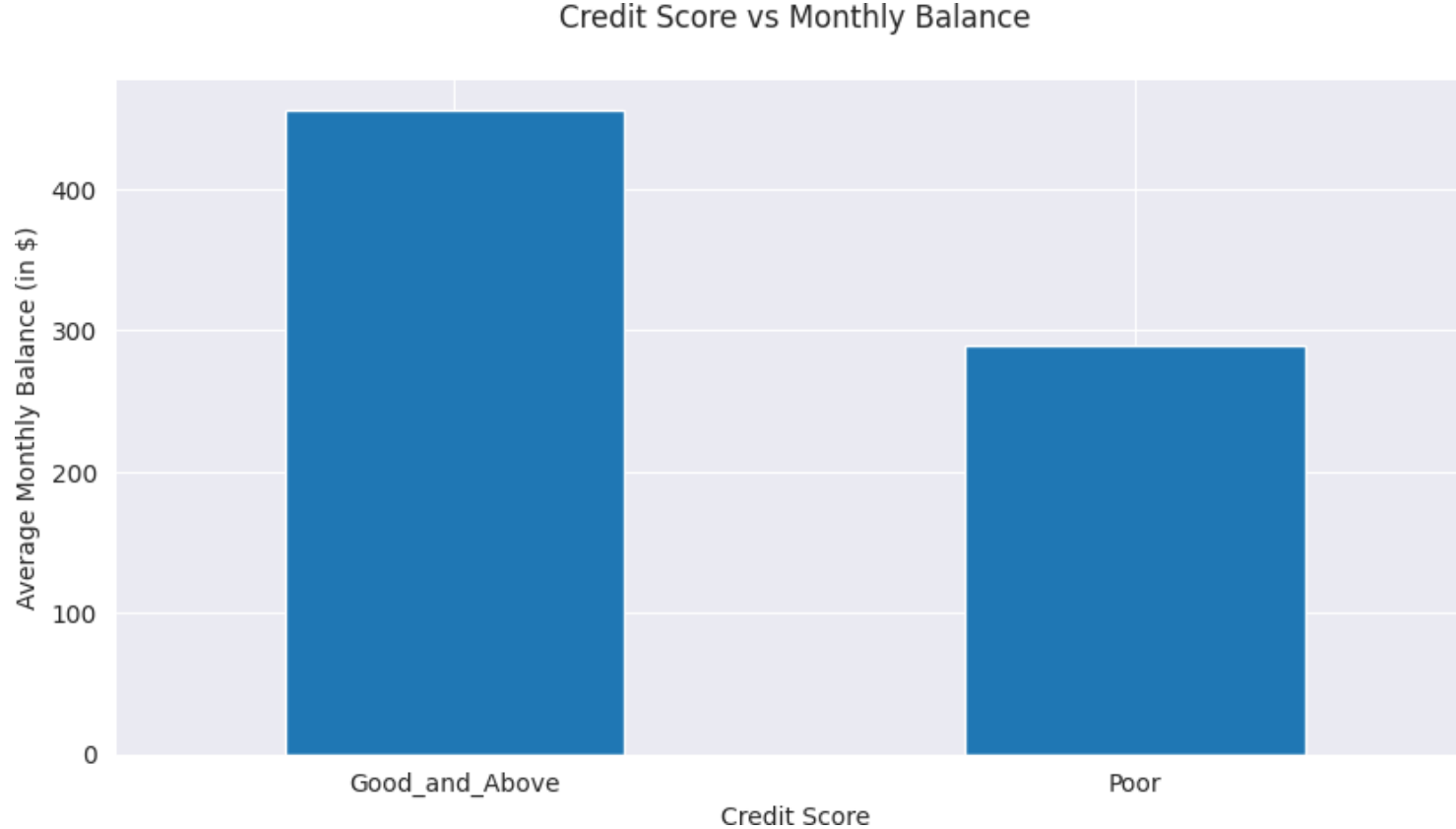
Observation: Customers with a 'Poor' credit score tend to have a lower Average Monthly Balance (~USD 290) as compared to customers having a 'Good and Above' credit score (~USD 480).

ANALYSING CHARACTERISTICS OF CUSTOMERS WITH A 'POOR' CREDIT SCORE

SL. NO.	FEATURE	VALUE / REMARKS
1	Age	34 Years
2	Average Annual Income	USD 150,000
3	Average Monthly Inhand Salary	USD 2,700
4	Average Delay from Due Date	36 Days
5	Average Number of Delayed Payments	35 Days
6	Average Outstanding Debt	USD 2,600
7	Credit Utilization Ration	31
8	Total EMI Per Month	USD 1,400
9	Average Month Investment	USD 600
10	Average Monthly Balance	USD 290
11	Credit Mix	Bad
12	Payment Behaviour	Low Spent Small Value Payments

THANK YOU