FRAUD DETECTION ANALYSIS

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ABOUT THE CREDITCARD_FRAUD DATASET

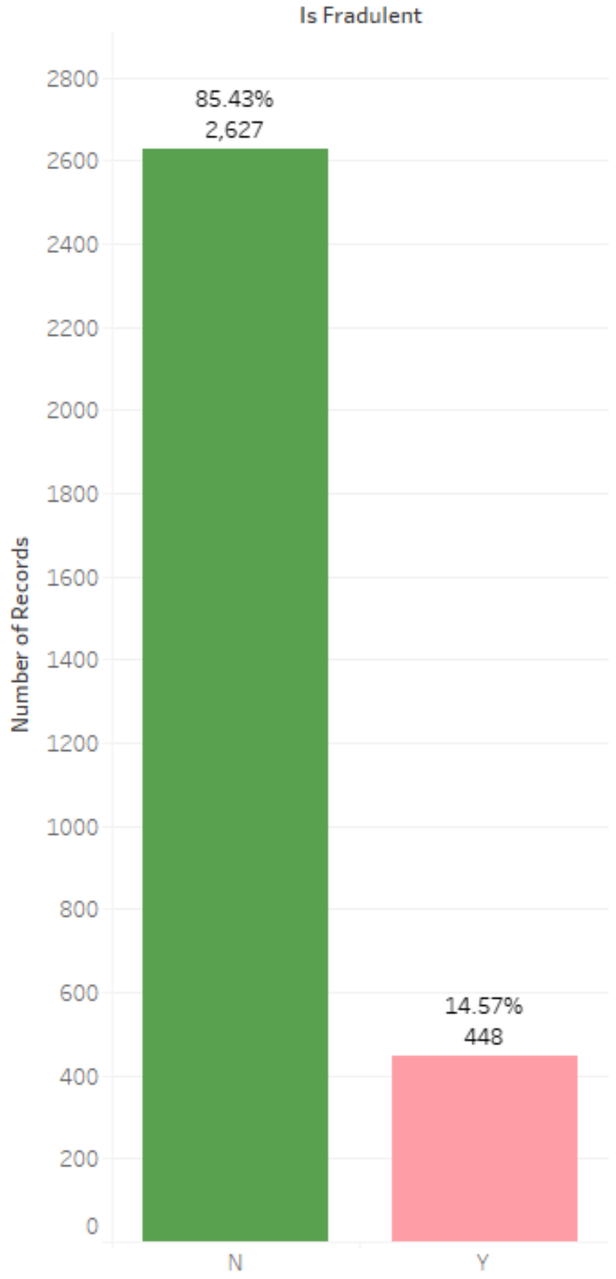
Name

creditcard_fraud detection.csv

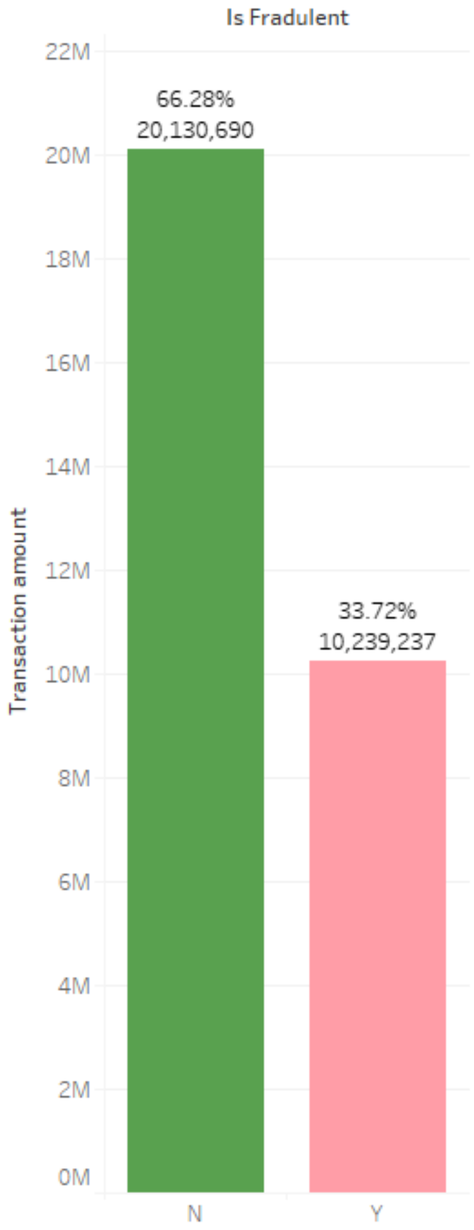
Fields

Type	Field Name	Phy...	Re...
Abc	Is declined	credi...	Is de...
Abc	Is Foreign Transaction	credi...	Is For...
Abc	Is Fradulent	credi...	Is Fra...
🌐	Is High Risk Country	credi...	Is Hig...
#	Total Number of declines/day	credi...	Total ...
#	Average Amount/transaction/...	credi...	Avera...
#	Number of Records	credi...	Num...
#	Transaction amount	credi...	Trans...
Abc	Currency	credi...	Curre...

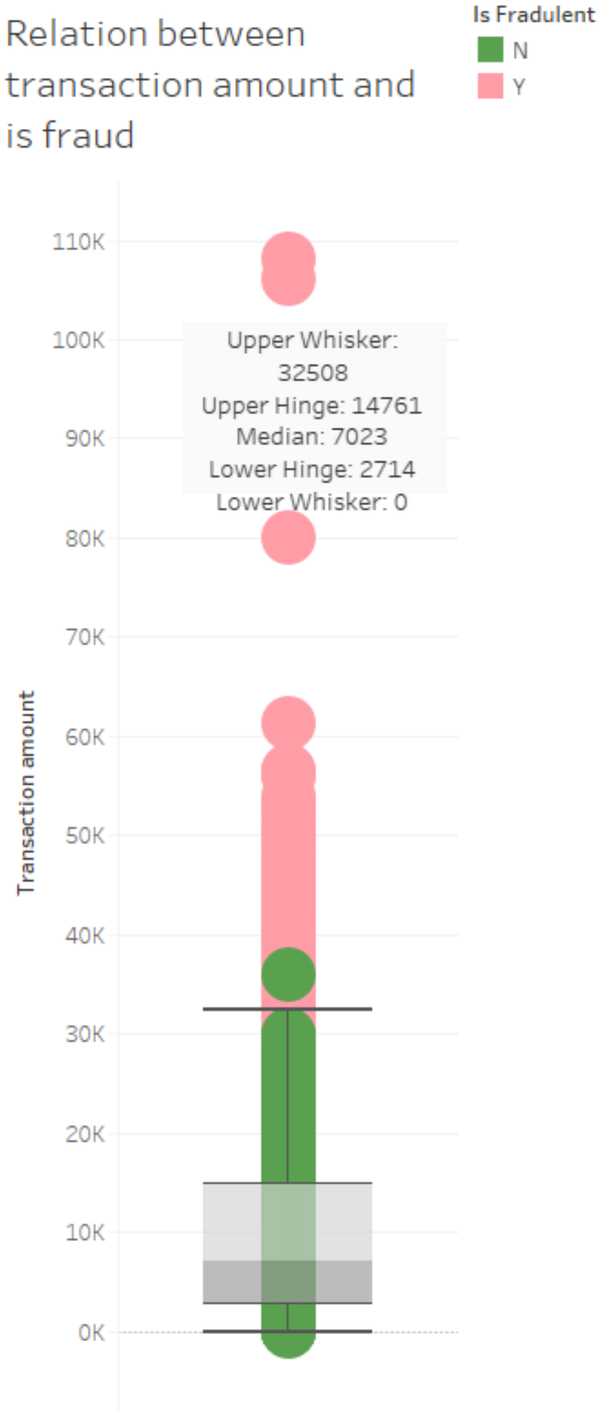
Number of records of fraud and non-fraud transactions

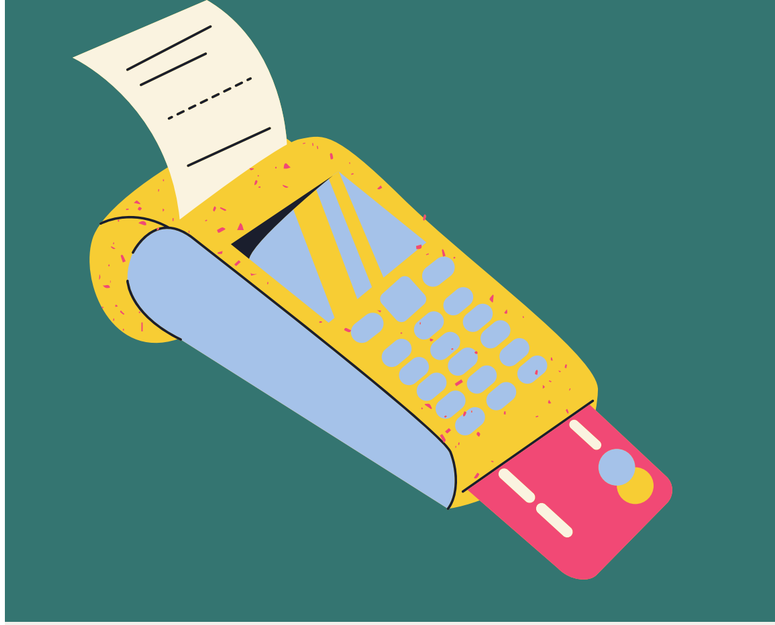


Total amount of transaction of fraud and non-fraud transactions



Relation between transaction amount and is fraud





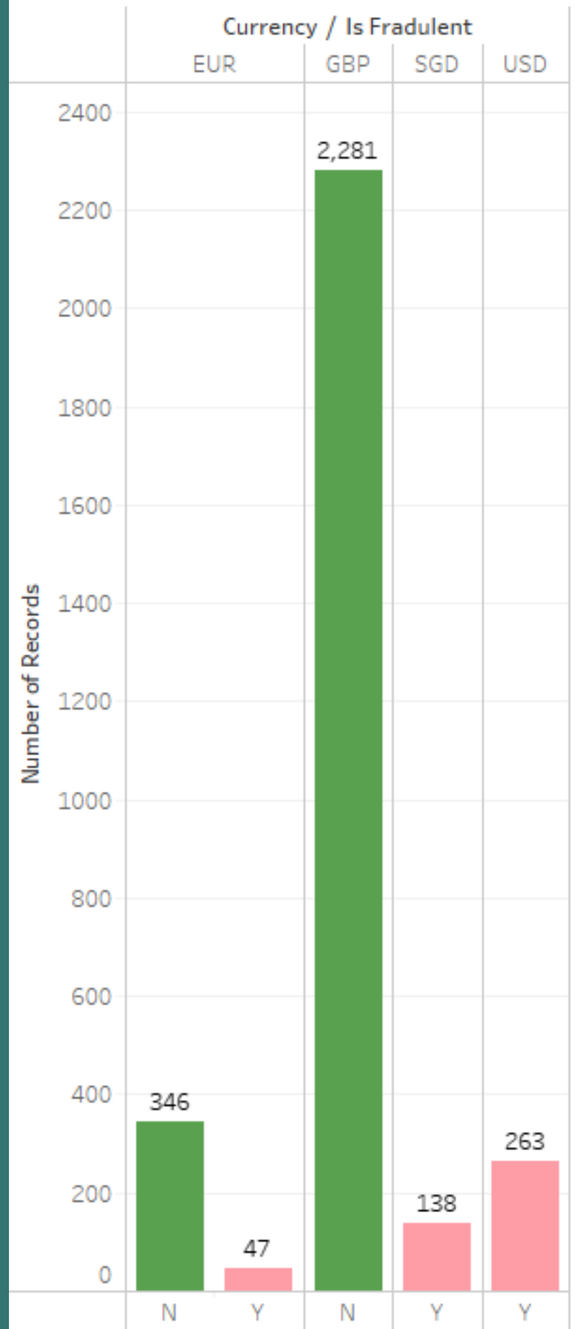
THE TOTAL NUMBER OF TRANSACTIONS IS 3,075

THE TOTAL AMOUNT OF ALL THE TRANSACTIONS IS 30,369,927

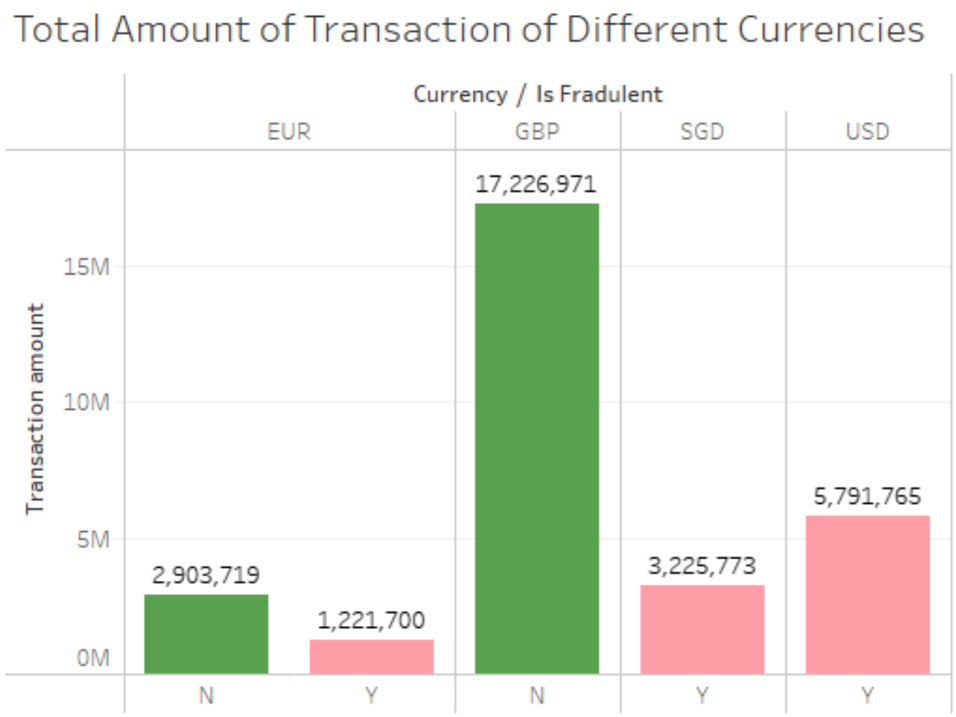
IS THERE A RELATIONSHIP BETWEEN CURRENCY TYPE AND FRAUD TRANSACTIONS?

YES!

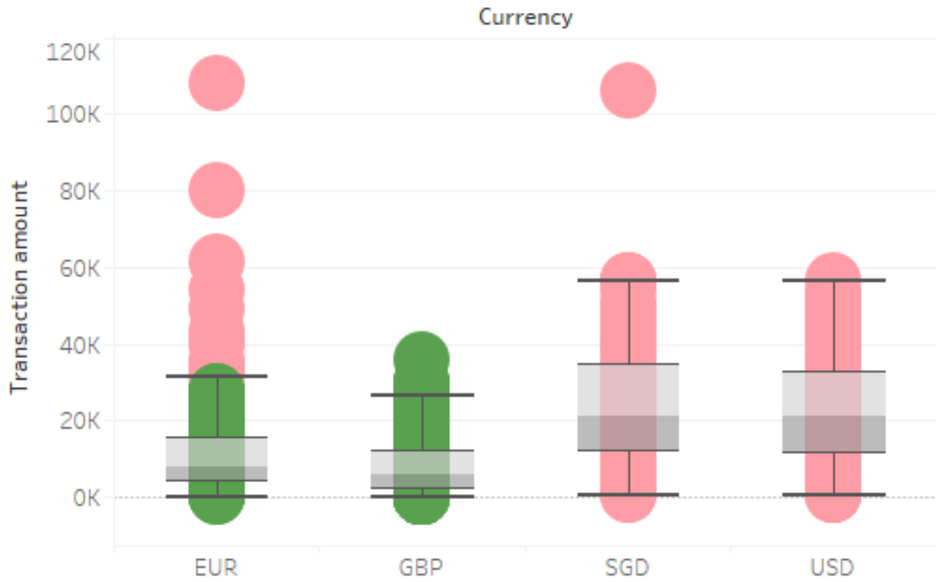
Total Number of Transaction of Different Currencies



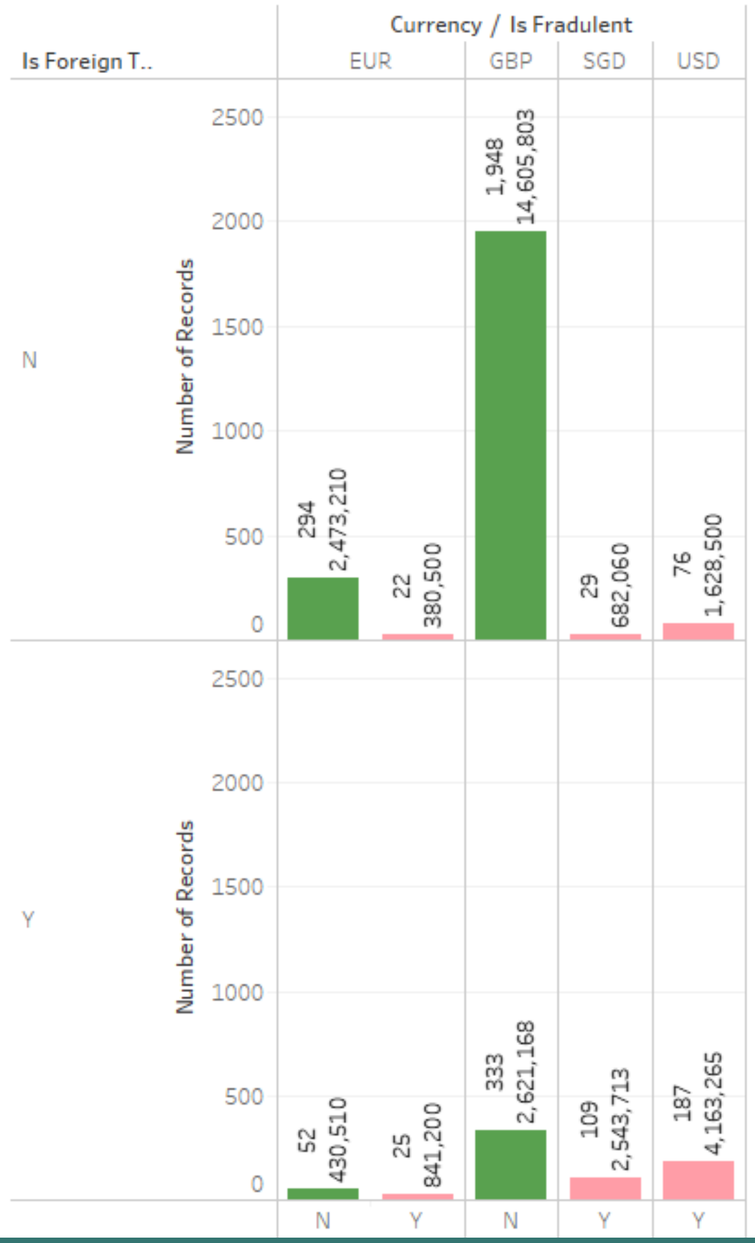
Total Amount of Transaction of Different Currencies



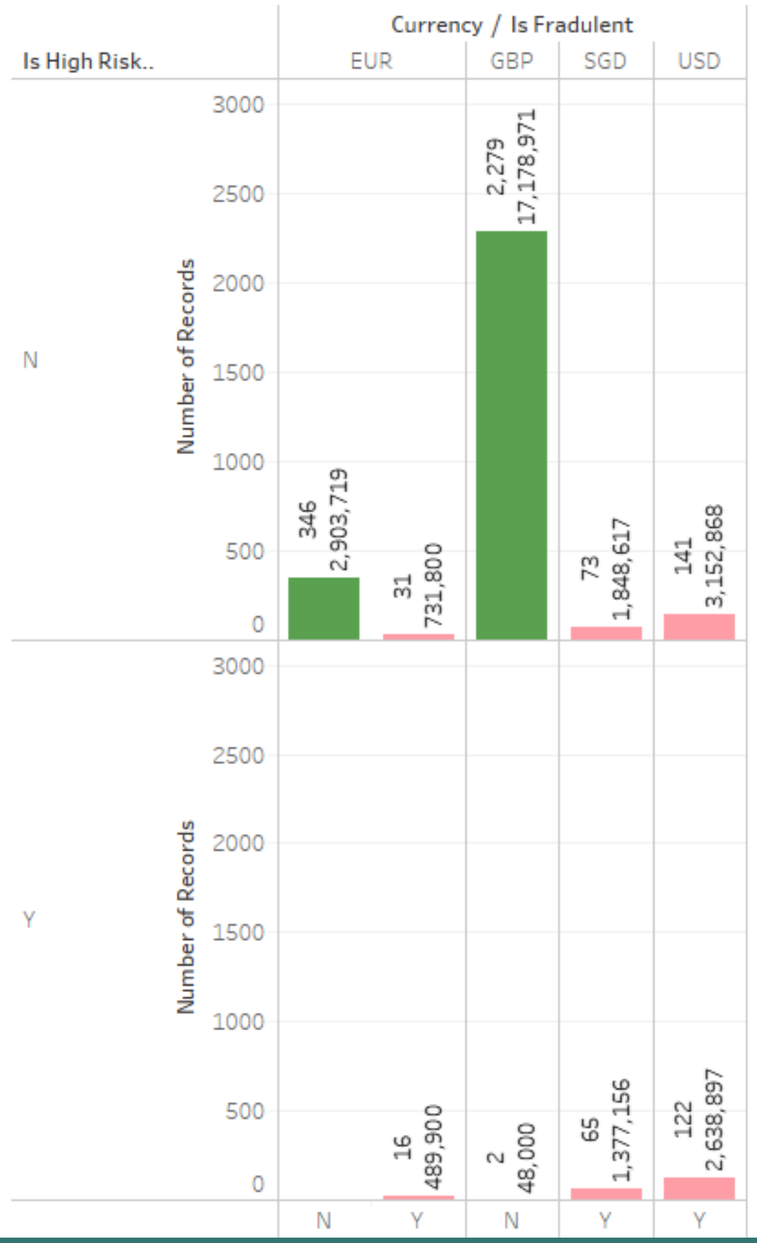
Transaction amount and Fraud Relation of different currencies



Total Number of Transaction of Different Currencies in relation with foriegn transaction



Total Number of Transaction of Different Currencies in relation with high risk country



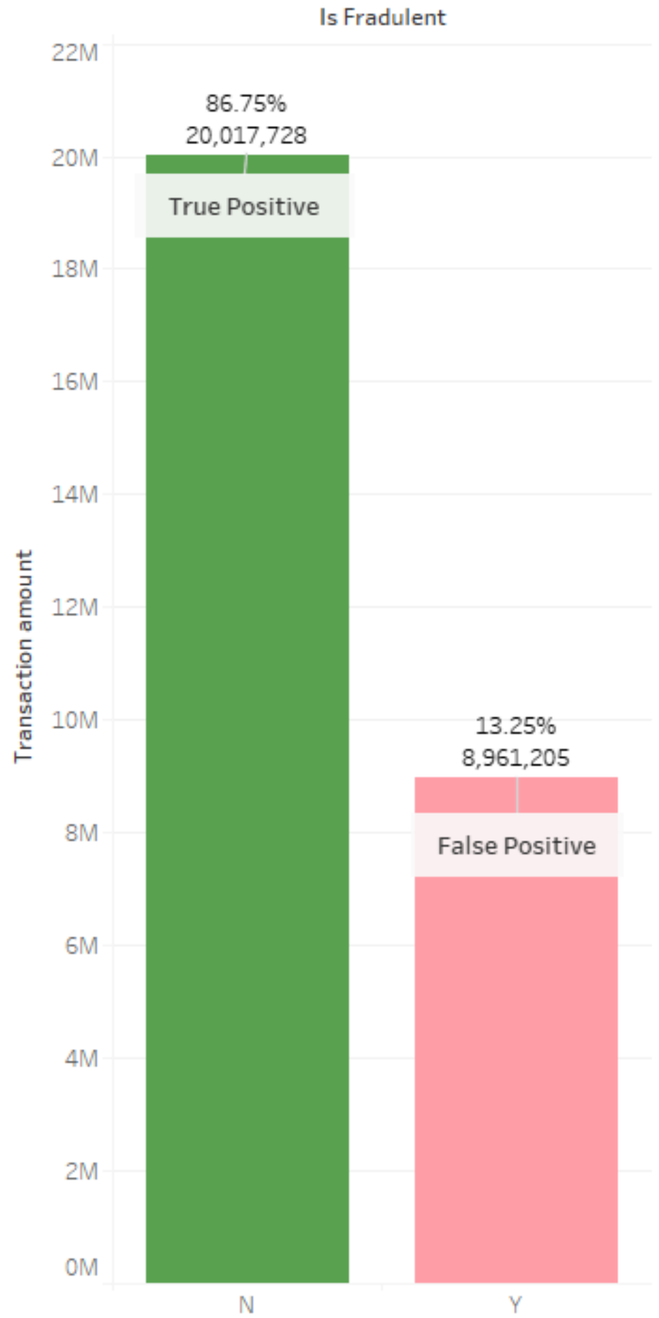
TOTAL TRANSACTIONS CATEGORIZED BY CURRENCY INVOLVING FOREIGN TRANSACTIONS AND HIGH-RISK COUNTRIES.

SAFETY NET OVERVIEW

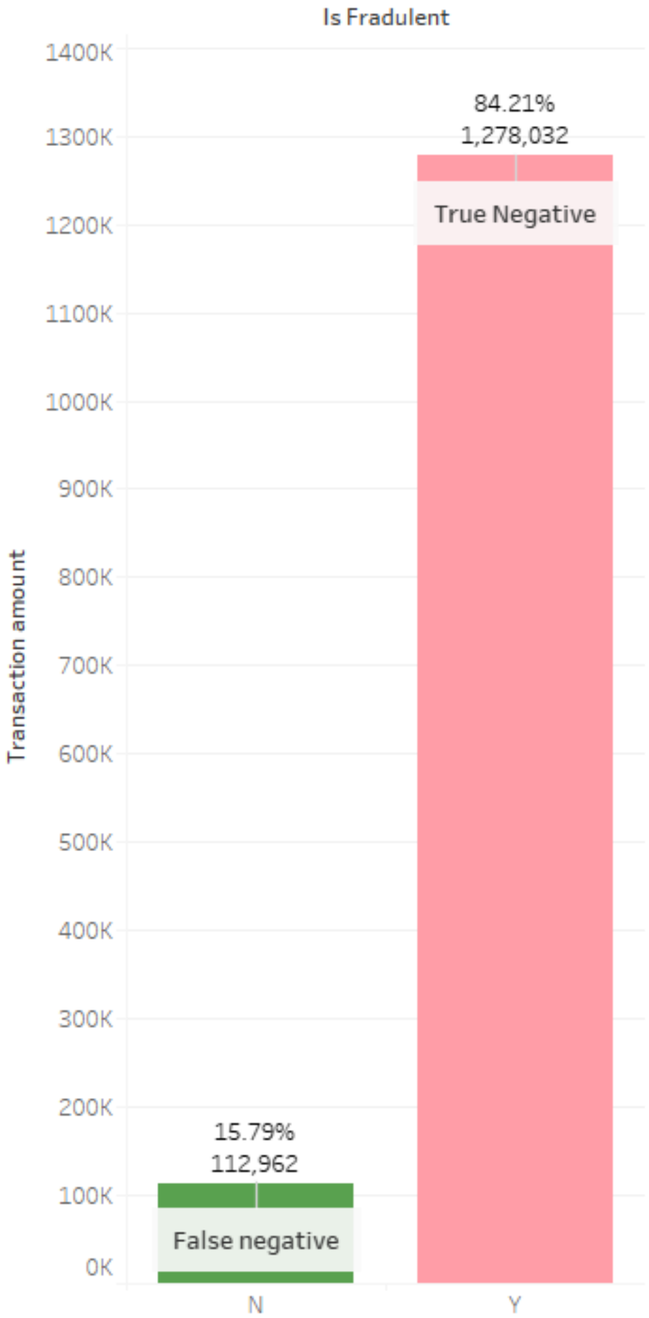
WHAT IS A SAFETY NET?

SIGNIFICANCE OF SAFETY NET

Transaction Not Declined fraud Assesment



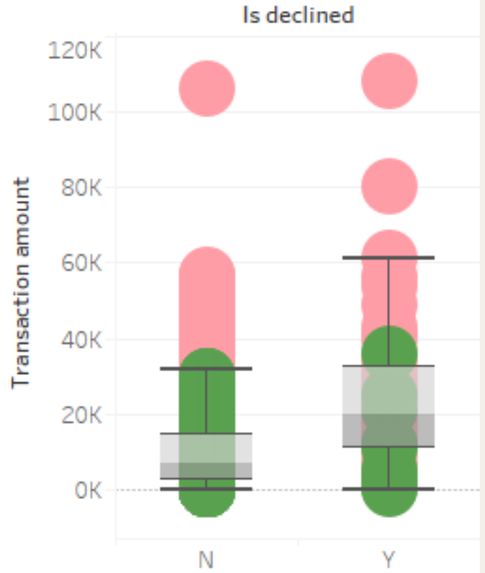
Transaction Declined Fraud Assesment



Confusion Matrix of Is declined and Is Fradulent

Is declined	Is Fradulent N	Is Fradulent Y
N	2,618 20,017,728	400 8,961,205
Y	9 112,962	48 1,278,032

Relation between transaction amount and is declined



SAFETY NET ANALYSIS

IS THE SAFETY NET WORKING?

Declined: Yes --> Negative relation

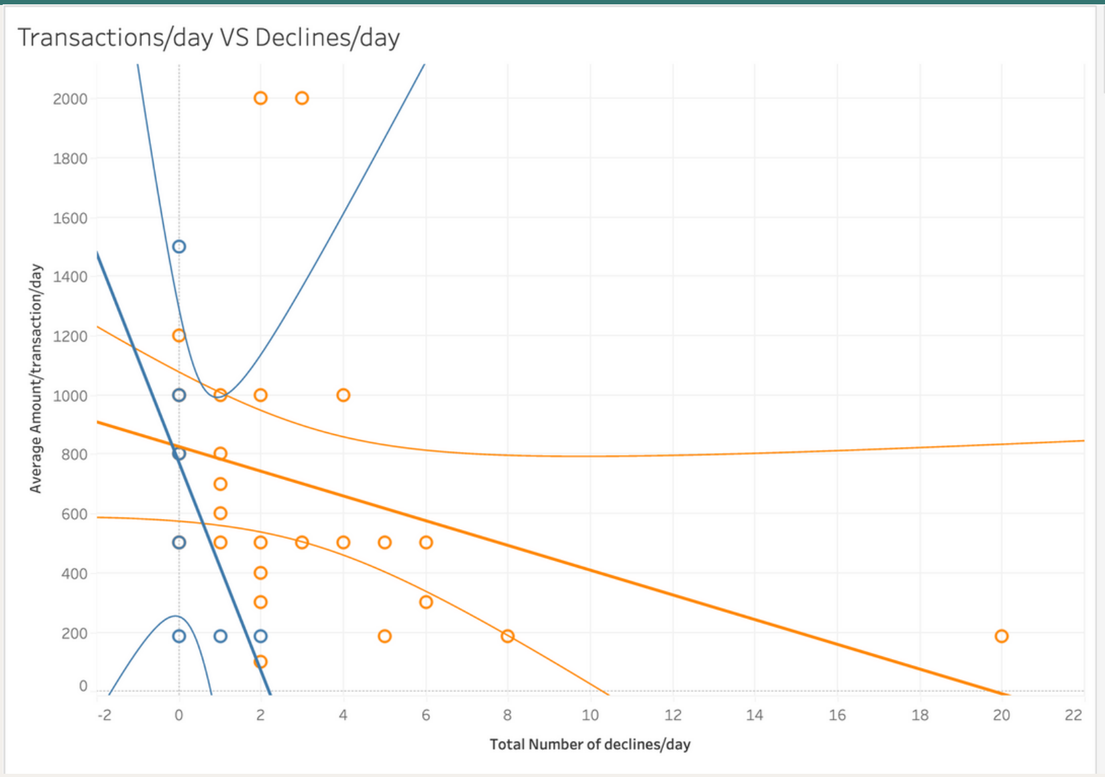
Potential reasons:

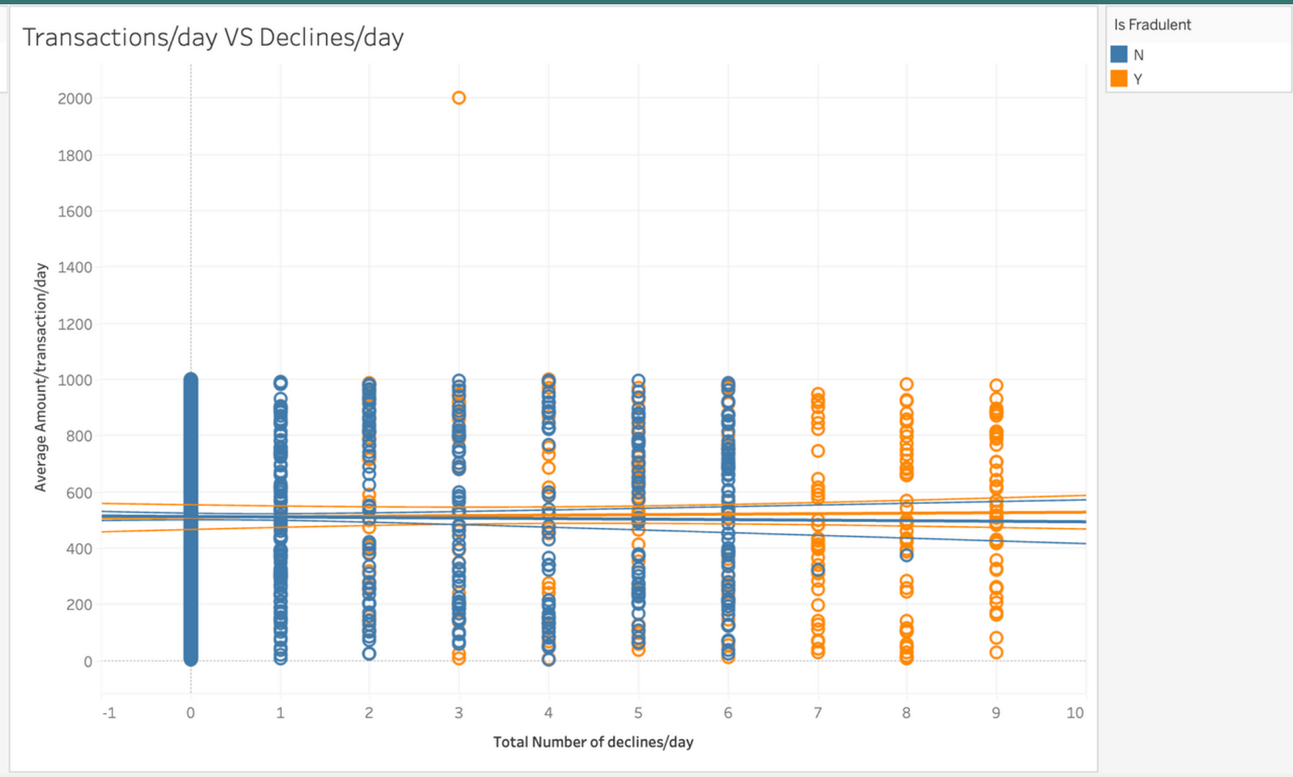
- Partial Effectiveness
- False Positives

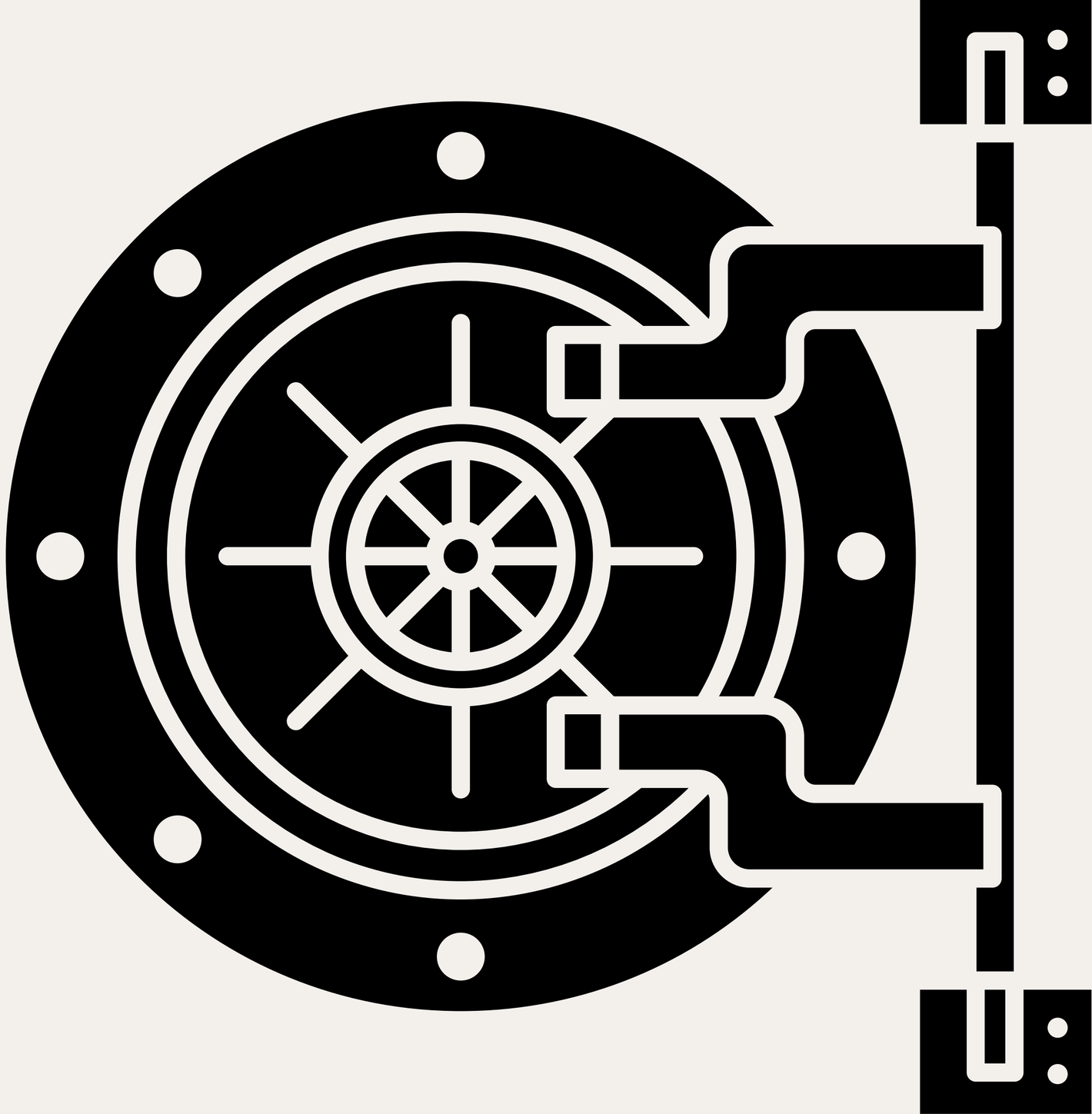
Declined: No --> No relation

Potential reasons:

- Time Trends
- Transaction Amount





CONCLUSION: SEEMS TO FOR SMALL FRAUDS

Questions and Answers