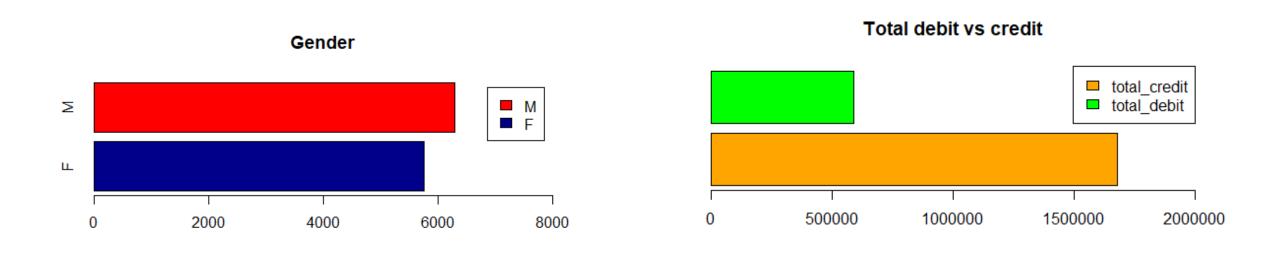


Exploratory Data Analysis

(Based on R)

### Basic insights on Gender & Transaction type

Transaction amount vs Gender and Transaction type

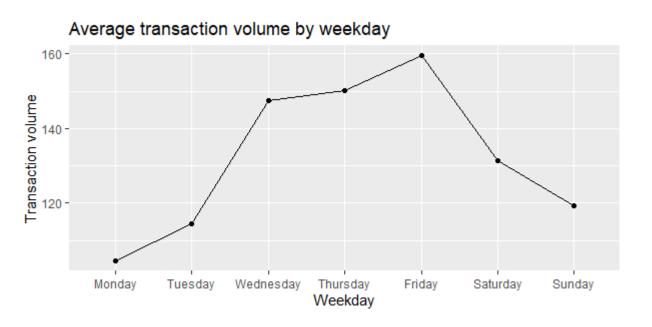


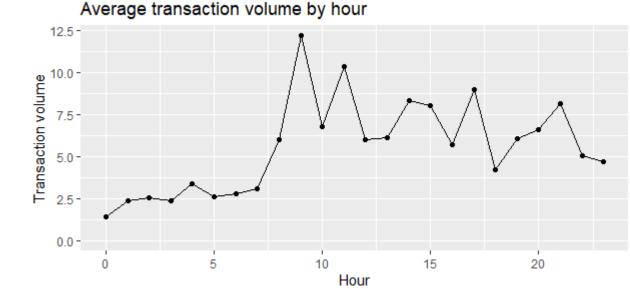
Inference: Males have higher amount of transactions (credit and debit) compared to females

Inference: Total for credit transactions is higher than total for debit transactions

## Weekly and hourly transaction frequency

Weekly/ hourly transaction frequency



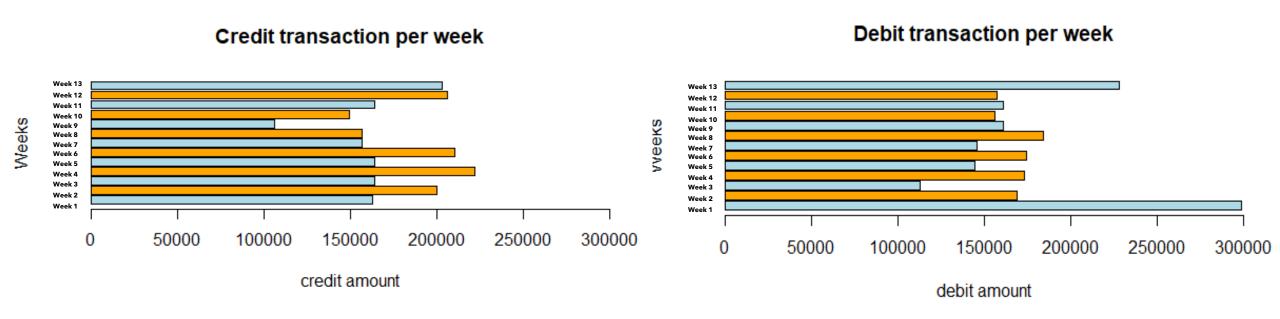


Inference: Transaction amount increases every day peaking at Friday after which it falls over the weekend

Inference: Transaction amount varies across 24 hours with the highest being at hour 9 and lowest at hour 0

### Dataset segmentation - Weekly transactions

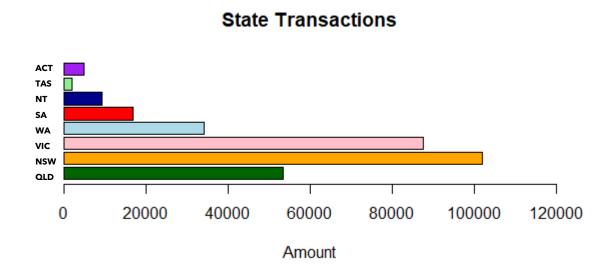
Weekly average amount and frequency (credit & debit)



Inference: Higher credit does not directly translate to high debit transactions as we observe high debit weeks correlated with low credit weeks and vice versa. (Data should be normalized & correlated for further insight.)

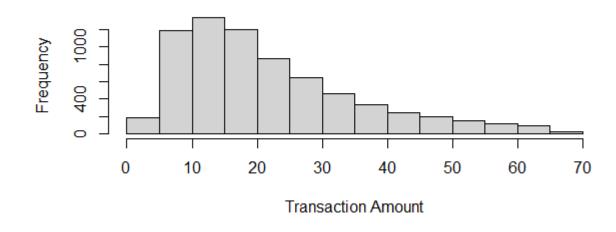
# Transactions per state and purchase transaction amount frequency

Transaction amount vs Merchant state & Transaction frequency for purchases



### Inference: Highest transactions (credit & debit) in NSW followed by VIC and QLD. The lowest is in TAS

#### Histogram of purchase transaction amount



Inference: Purchase transaction frequency ranges from 0 to 70 with highest transaction frequency between the 10-20 range