

Lending Club Loan Rejects and Approvals

Data Visualization Project
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What is Lending Club?

Lending Club is the world's largest online credit marketplace, facilitating personal loans, business loans, and financing for elective medical procedures. Borrowers access lower interest rate loans through a fast and easy online or mobile interface.

2 sets of data - Rejected Loans and Approved Loans from 2007 to 2016Q2

Rejects

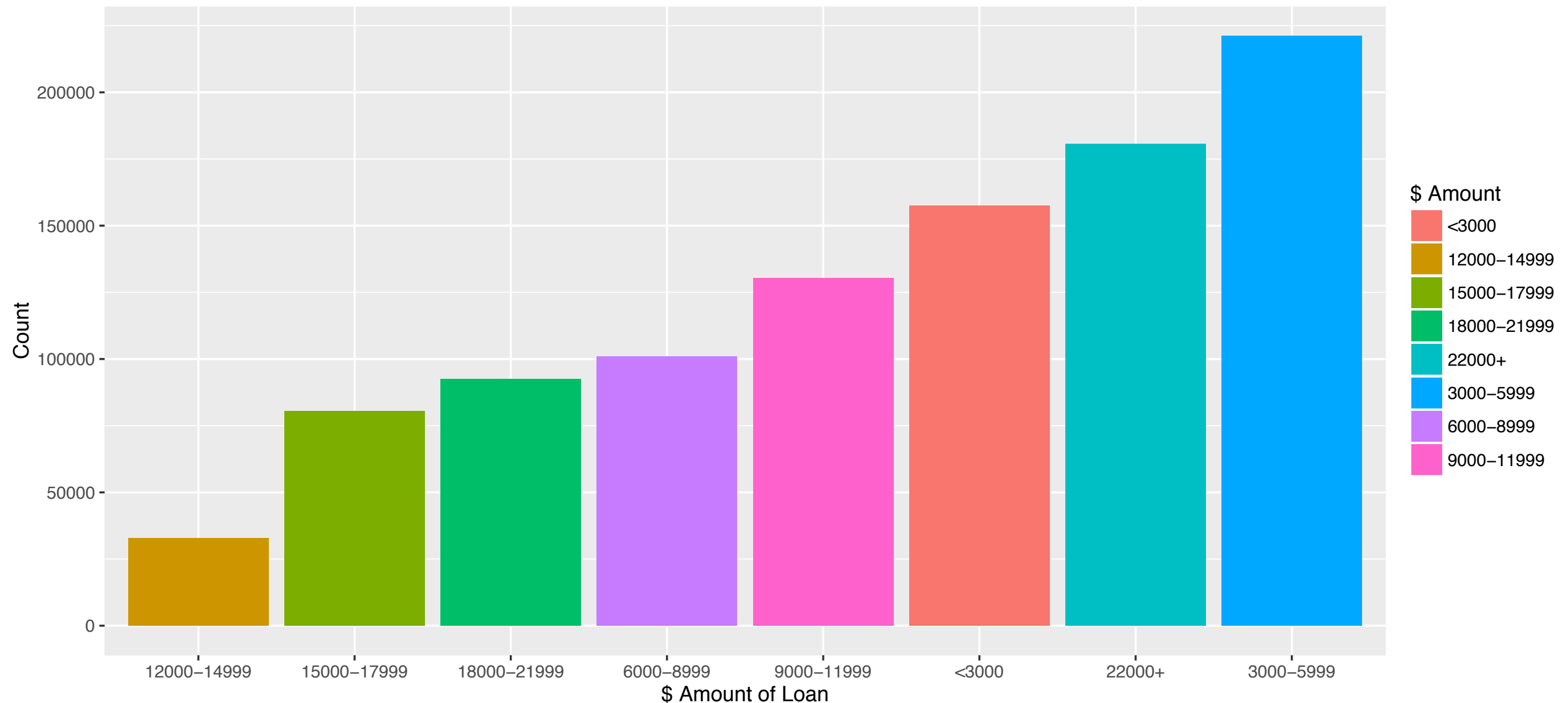
What were loan amounts of rejected loan applications? What was the average amount? Loan amounts were bucketed into 8 categories: under \$3000, \$3000-5999, \$6000-8999, \$9000-11999, \$12000-14999, \$15000-17999, \$18000-21999, \$22000+

```
f = mutate(ldata, amt_cat =
  ifelse(Amount.Requested < 3000, '<3000',
  ifelse(Amount.Requested >= 3000 & Amount.Requested < 6000, '3000-5999',
  ifelse(Amount.Requested >= 6000 & Amount.Requested < 9000, '6000-8999',
  ifelse(Amount.Requested >= 9000 & Amount.Requested < 12000, '9000-11999', '12000',
  ifelse(Amount.Requested >= 12000 & Amount.Requested < 15000, '12000-14999',
  ifelse(Amount.Requested >= 15000 & Amount.Requested < 18000, '15000-17999',
  ifelse(Amount.Requested >= 18000 & Amount.Requested < 21000, '18000-21999',
  '22000+')
  ))))

groupedByLoadAmt = group_by(f, amt_cat) %>% count(., amt_cat)

LoanPlot = ggplot(data =
  groupedByLoadAmt, aes(x = reorder(amt_cat, n), y = n)) +
  geom_bar(aes(fill = amt_cat), stat="identity")
LoanPlot +
  xlab("$ Amount of Loan") + ylab("Count") +
  labs(title="What Are $$ Amounts of Rejected Loan Applications? (2016Q2)") +
  labs(fill="$ Amount")
```

What Are \$\$ Amounts of Rejected Loan Applications? (2016Q2)



Are seekers of large loans (\$22000+) in highest debt category? Debt to Income Ratio is monthly debt divided by gross monthly income.

```
filter(f, amt_cat == '22000+') %>% summarise(.,
mean(as.numeric(strsplit(Debt.To.Income.Ratio, '%')), .02))
```

1 33.85238

```
summarise(ldata,  
mean(as.numeric(strsplit(Debt.To.Income.Ratio, '%')), .02))  
1                24.53298
```