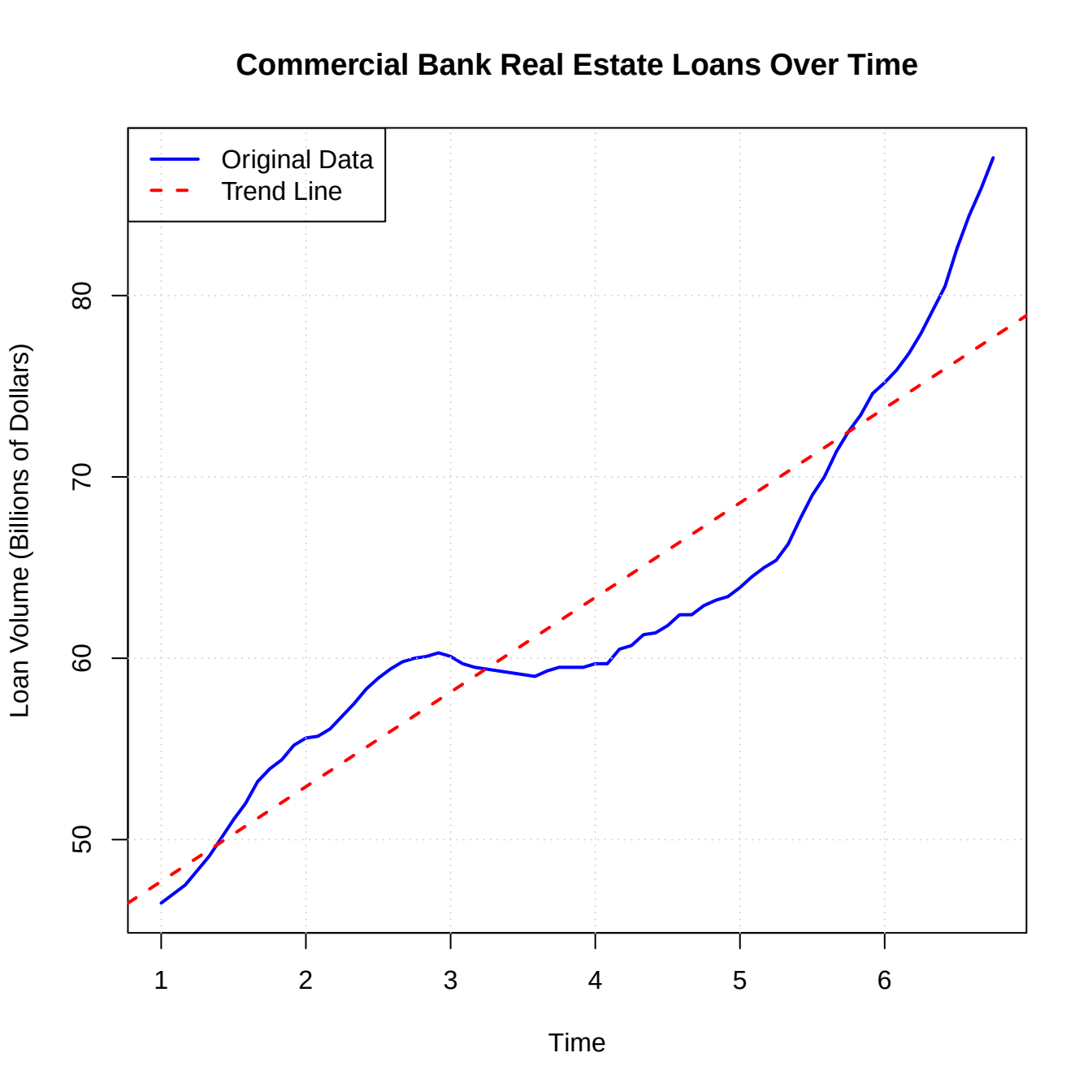
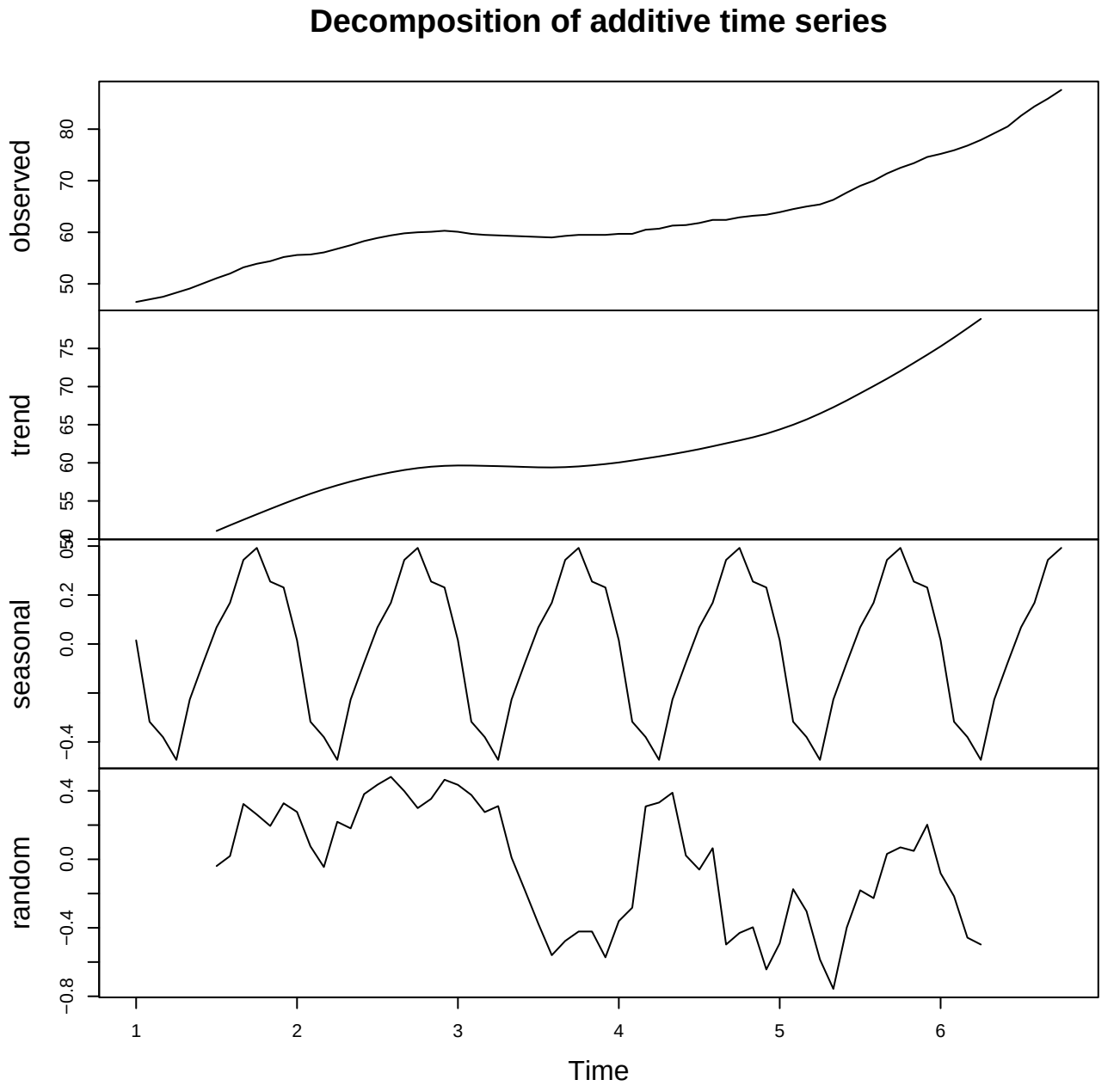
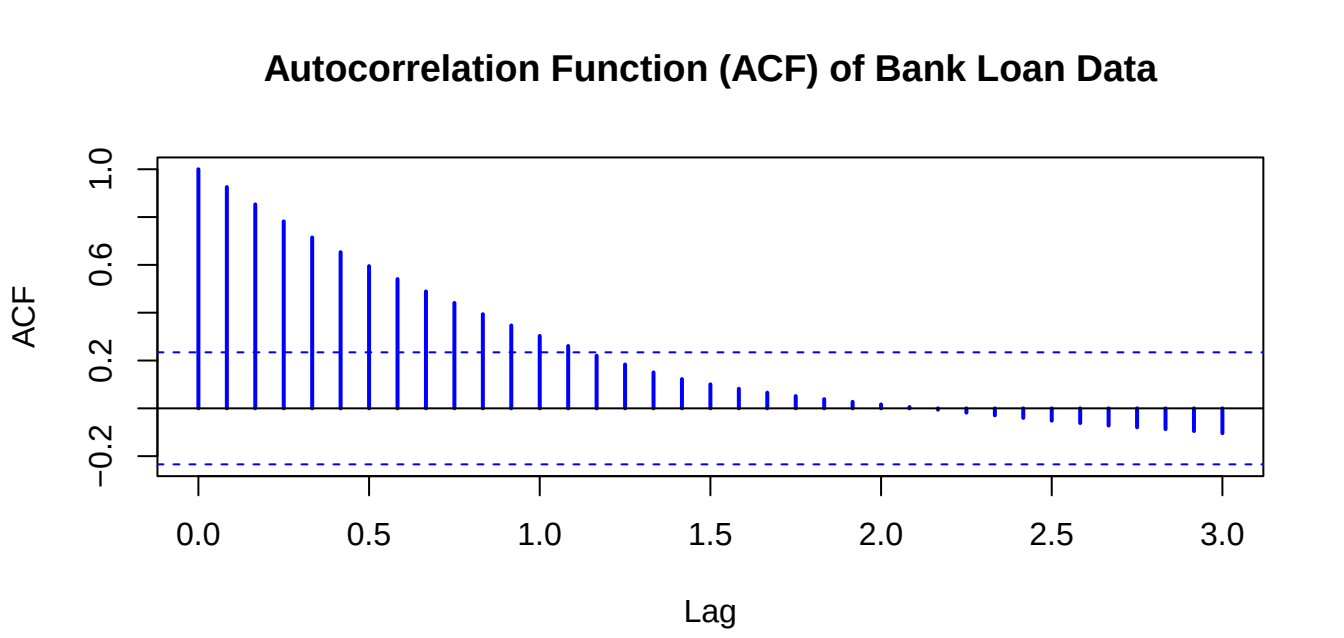
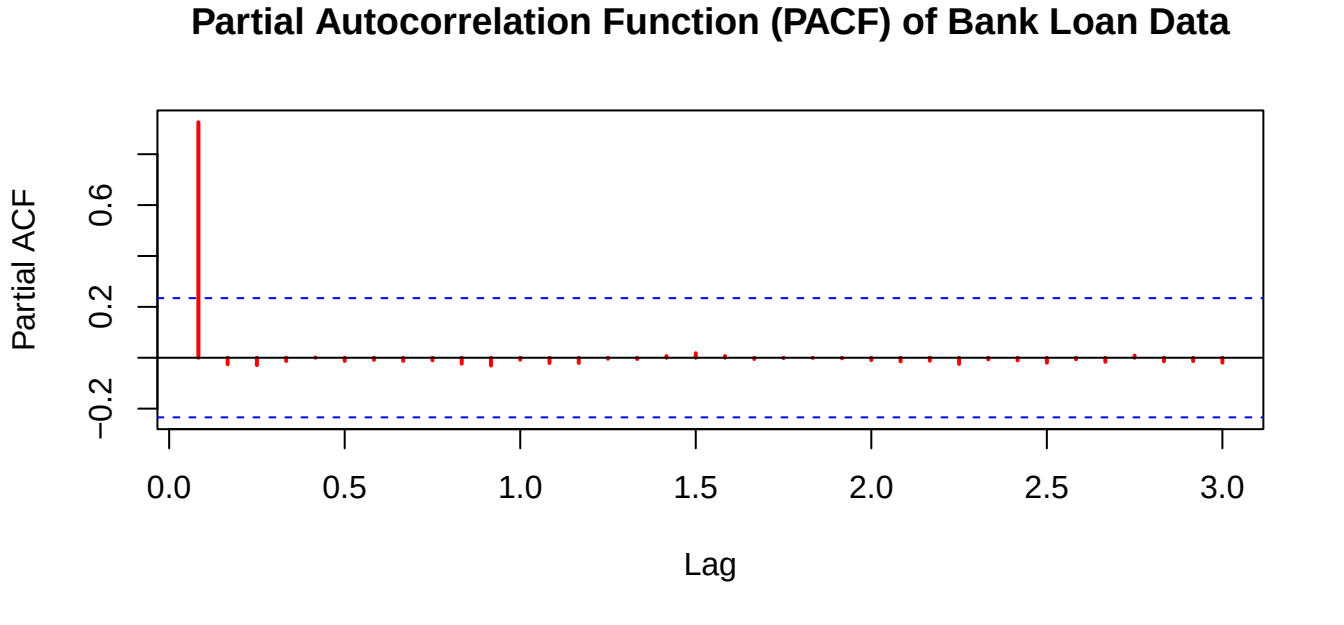
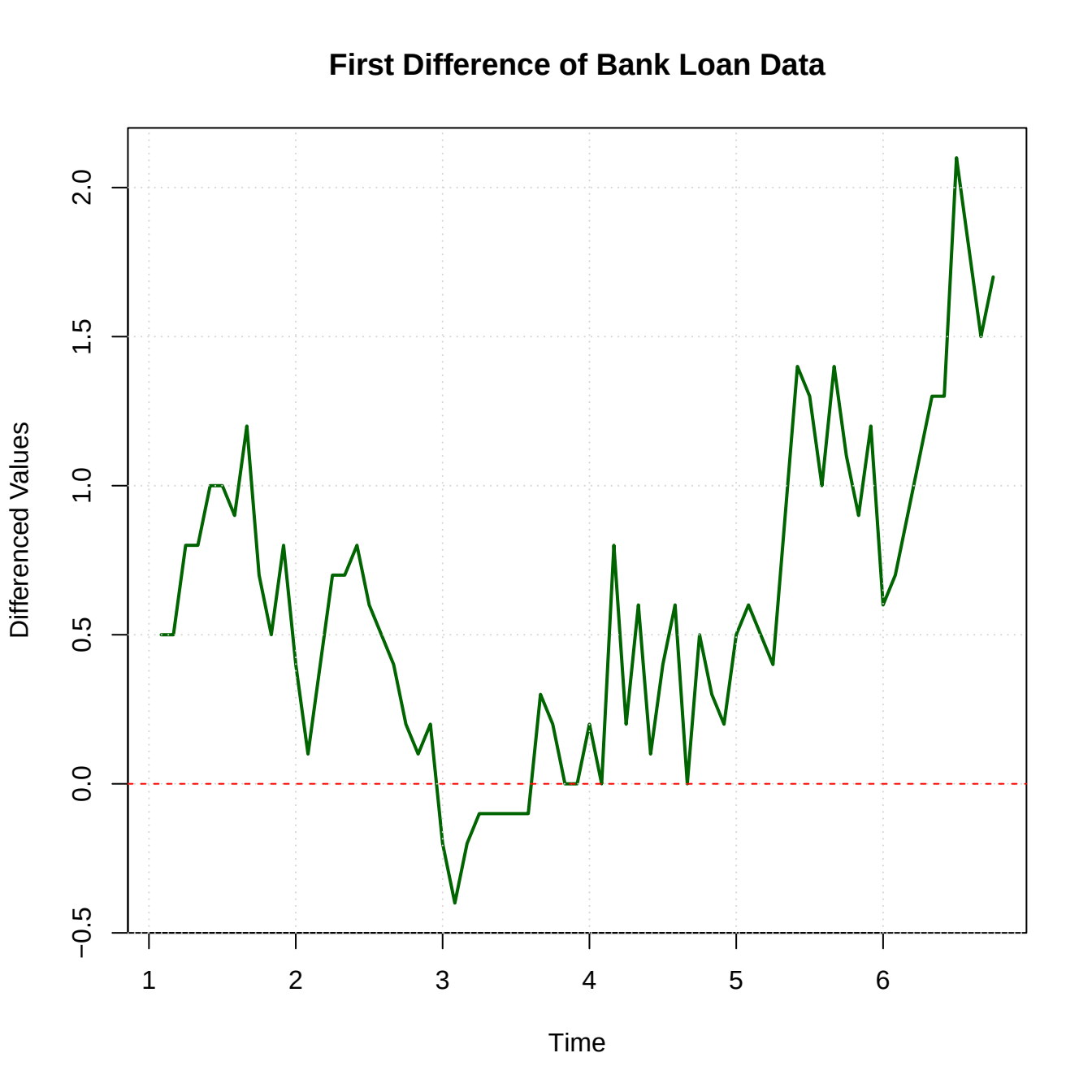

Commercial Bank Real Estate Loans Over Time
Original Data
Trend Line
Loan Volume (Billions of Dollars)
50
60
70
80
1
2
3
4
5
6
Time


Decomposition of additive time series
observed
trend
seasonal
random
Time
50
60
70
80
55
65
75
0.2
0.0
−0.4
0.4
−0.8
1
2
3
4
5
6


Autocorrelation Function (ACF) of Bank Loan Data
ACF
1.0
0.6
0.2
−0.2
0.0
0.5
1.0
1.5
2.0
2.5
3.0
Lag


Partial Autocorrelation Function (PACF) of Bank Loan Data
Partial ACF
0.6
0.2
−0.2
0.0
0.5
1.0
1.5
2.0
2.5
3.0
Lag


First Difference of Bank Loan Data
Differenced Values
2.0
1.5
1.0
0.5
0.0
−0.5
1
2
3
4
5
6
Time