

# Using the Commercial Paper History Package

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## Commercial Paper History

This R package `usfrbcp` provides functions for processing the US Federal Reserve Bank's commercial paper history data. The main function posts a query to the US Federal Reserve Bank's web site. By default the download includes commercial paper rates, volumes, and outstanding issue counts, variously in daily, weekly, or monthly frequency. The download data from the service is in compressed XML format. The query function transforms that data into a list of products. Several supporting functions then convert these lists by data type into smaller lists of data frames for convenient usage. The data frames can be used as-is or converted easily to a time series format such as `xts`.

The main function retrieves the commercial paper data history archive from the web service and extracts it into a collection of lists:

```
require(usfrbcp)
```

```
## Loading required package: usfrbcp
```

```
cp <- getCommercialPaper()
```

```
## Download and parse complete.  Converting to list...  
## List conversion complete.
```

```
summary(cp)
```

```
## Federal Reserve Board Commercial Paper  
## Prepared: 2014-11-04T13:55:59  
## Data sets: 6  
## Data set RATES contains 24 series  
## Data set VOL contains 60 series  
## Data set OUTST contains 77 series  
## Data set OUTST_YREND contains 4 series  
## Data set OUTST_OLD contains 25 series  
## Data set RATES_OLD contains 12 series
```

We then decompose this into the products of interest, such as

```
rates <- getCommercialPaperRates(cp, "none")  
summary(rates)
```

```
## Prepared: 2014-11-04T13:55:59  
## RIFSPNAAD01_N.B Overnight AA nonfinancial commercial paper rate  
## RIFSPNAAD07_N.B 7-day AA nonfinancial commercial paper rate  
## RIFSPNAAD15_N.B 15-day AA nonfinancial commercial paper rate
```

```
## RIFSPPNAAD30_N.B 30-day AA nonfinancial commercial paper rate
## RIFSPPNAAD60_N.B 60-day AA nonfinancial commercial paper rate
## RIFSPPNAAD90_N.B 90-day AA nonfinancial commercial paper rate
## RIFSPPNA2P2D01_N.B Overnight A2/P2 nonfinancial commercial paper rate
## RIFSPPNA2P2D07_N.B 7-day A2/P2 nonfinancial commercial paper rate
## RIFSPPNA2P2D15_N.B 15-day A2/P2 nonfinancial commercial paper rate
## RIFSPPNA2P2D30_N.B 30-day A2/P2 nonfinancial commercial paper rate
## RIFSPPNA2P2D60_N.B 60-day A2/P2 nonfinancial commercial paper rate
## RIFSPPNA2P2D90_N.B 90-day A2/P2 nonfinancial rate
## RIFSPPFAAD01_N.B Overnight AA financial commercial paper rate
## RIFSPPFAAD07_N.B 7-day AA financial commercial paper rate
## RIFSPPFAAD15_N.B 15-day AA financial commercial paper rate
## RIFSPPFAAD30_N.B 30-day AA financial commercial paper rate
## RIFSPPFAAD60_N.B 60-day AA financial commercial paper rate
## RIFSPPFAAD90_N.B 90-day AA financial commercial paper rate
## RIFSPPAAAD01_N.B Overnight AA asset-backed commercial paper rate
## RIFSPPAAAD07_N.B 7-day AA asset-backed commercial paper rate
## RIFSPPAAAD15_N.B 15-day AA asset-backed commercial paper rate
## RIFSPPAAAD30_N.B 30-day AA asset-backed commercial paper rate
## RIFSPPAAAD60_N.B 60-day AA asset-backed commercial paper rate
## RIFSPPAAAD90_N.B 90-day AA asset-backed commercial paper rate
```

```
volumes <- getCommercialPaperVolumes(cp, "none")
summary(volumes)
```

```
## Prepared: 2014-11-04T13:55:59
## NONFIN.1_4.AA.AMT Amount of AA nonfinancial commercial paper maturing in 1-4 days
## NONFIN.1_4.A2P2.AMT Amount of A2/P2 nonfinancial commercial paper maturing in 1-4 days
## FIN.1_4.AA.AMT Amount of AA financial commercial paper maturing in 1-4 days
## AB.1_4.AA.AMT Amount of AA asset-backed commercial paper maturing in 1-4 days
## MKT.1_4.MKT.AMT Amount of commercial paper maturing in 1-4 days
## NONFIN.1_4.AA.VOL Number of issues of AA nonfinancial commercial paper maturing in 1-4 days
## NONFIN.1_4.A2P2.VOL Number of issues of A2/P2 nonfinancial commercial paper maturing in 1-4 days
## FIN.1_4.AA.VOL Number of issues of AA financial commercial paper maturing in 1-4 days
## AB.1_4.AA.VOL Number of issues of AA asset-backed commercial paper maturing in 1-4 days
## MKT.1_4.MKT.VOL Number of issues of commercial paper maturing in 1-4 days
## NONFIN.5_9.AA.AMT Amount of AA nonfinancial commercial paper maturing in 5-9 days
## NONFIN.5_9.A2P2.AMT Amount of A2/P2 nonfinancial commercial paper maturing in 5-9 days
## FIN.5_9.AA.AMT Amount of AA financial commercial paper maturing in 5-9 days
## AB.5_9.AA.AMT Amount of AA asset-backed commercial paper maturing in 5-9 days
## MKT.5_9.MKT.AMT Amount of commercial paper maturing in 5-9 days
## NONFIN.5_9.AA.VOL Number of issues of AA nonfinancial commercial paper maturing in 5-9 days
## NONFIN.5_9.A2P2.VOL Number of issues of A2/P2 nonfinancial commercial paper maturing in 5-9 days
## FIN.5_9.AA.VOL Number of issues of AA financial commercial paper maturing in 5-9 days
## AB.5_9.AA.VOL Number of issues of AA asset-backed commercial paper maturing in 5-9 days
## MKT.5_9.MKT.VOL Number of issues of commercial paper maturing in 5-9 days
## NONFIN.10_20.AA.AMT Amount of AA nonfinancial commercial paper maturing in 10-20 days
## NONFIN.10_20.A2P2.AMT Amount of A2/P2 nonfinancial commercial paper maturing in 10-20 days
## FIN.10_20.AA.AMT Amount of AA financial commercial paper maturing in 10-20 days
## AB.10_20.AA.AMT Amount of AA asset-backed commercial paper maturing in 10-20 days
## MKT.10_20.MKT.AMT Amount of commercial paper maturing in 10-20 days
## NONFIN.10_20.AA.VOL Number of issues of AA nonfinancial commercial paper maturing in 10-20 days
## NONFIN.10_20.A2P2.VOL Number of issues of A2/P2 nonfinancial commercial paper maturing in 10-20 days
## FIN.10_20.AA.VOL Number of issues of AA financial commercial paper maturing in 10-20 days
## AB.10_20.AA.VOL Number of issues of AA asset-backed commercial paper maturing in 10-20 days
## MKT.10_20.MKT.VOL Number of issues of commercial paper maturing in 10-20 days
## NONFIN.21_40.AA.AMT Amount of AA nonfinancial commercial paper maturing in 21-40 days
## NONFIN.21_40.A2P2.AMT Amount of A2/P2 nonfinancial commercial paper maturing in 21-40 days
```

```
## FIN.21_40.AA.AMT Amount of AA financial commercial paper maturing in 21-40 days
## AB.21_40.AA.AMT Amount of AA asset-backed commercial paper maturing in 21-40 days
## MKT.21_40.MKT.AMT Amount of commercial paper maturing in 21-40 days
## NONFIN.21_40.AA.VOL Number of issues of AA nonfinancial commercial paper maturing in 21-40 days
## NONFIN.21_40.A2P2.VOL Number of issues of A2/P2 nonfinancial commercial paper maturing in 21-40 days
## FIN.21_40.AA.VOL Number of issues of AA financial commercial paper maturing in 21-40 days
## AB.21_40.AA.VOL Number of issues of AA asset-backed commercial paper maturing in 21-40 days
## MKT.21_40.MKT.VOL Number of issues of commercial paper maturing in 21-40 days
## NONFIN.41_80.AA.AMT Amount of AA nonfinancial commercial paper maturing in 41-80 days
## NONFIN.41_80.A2P2.AMT Amount of A2/P2 nonfinancial commercial paper maturing in 41-80 days
## FIN.41_80.AA.AMT Amount of AA financial commercial paper maturing in 41-80 days
## AB.41_80.AA.AMT Amount of AA asset-backed commercial paper maturing in 41-80 days
## MKT.41_80.MKT.AMT Amount of commercial paper maturing in 41-80 days
## NONFIN.41_80.AA.VOL Number of issues of AA nonfinancial commercial paper maturing in 41-80 days
## NONFIN.41_80.A2P2.VOL Number of issues of A2/P2 nonfinancial commercial paper maturing in 41-80 days
## FIN.41_80.AA.VOL Number of issues of AA financial commercial paper maturing in 41-80 days
## AB.41_80.AA.VOL Number of issues of AA asset-backed commercial paper maturing in 41-80 days
## MKT.41_80.MKT.VOL Number of issues of commercial paper maturing in 41-80 days
## NONFIN.GT80.AA.AMT Amount of AA nonfinancial commercial paper maturing in greater than 80 days
## NONFIN.GT80.A2P2.AMT Amount of A2/P2 nonfinancial commercial paper maturing in greater than 80 days
## FIN.GT80.AA.AMT Amount of AA financial commercial paper maturing in greater than 80 days
## AB.GT80.AA.AMT Amount of AA asset-backed commercial paper maturing in greater than 80 days
## MKT.GT80.MKT.AMT Amount of commercial paper maturing in greater than 80 days
## NONFIN.GT80.AA.VOL Number of issues of AA nonfinancial commercial paper maturing in greater than 80 days
## NONFIN.GT80.A2P2.VOL Number of issues of A2/P2 nonfinancial commercial paper maturing in greater than 80 days
## FIN.GT80.AA.VOL Number of issues of AA financial commercial paper maturing in greater than 80 days
## AB.GT80.AA.VOL Number of issues of AA asset-backed commercial paper maturing in greater than 80 days
## MKT.GT80.MKT.VOL Number of issues of commercial paper maturing in greater than 80 days
```

The data frame might be converted to `xts` and plotted for example with `lattice`:

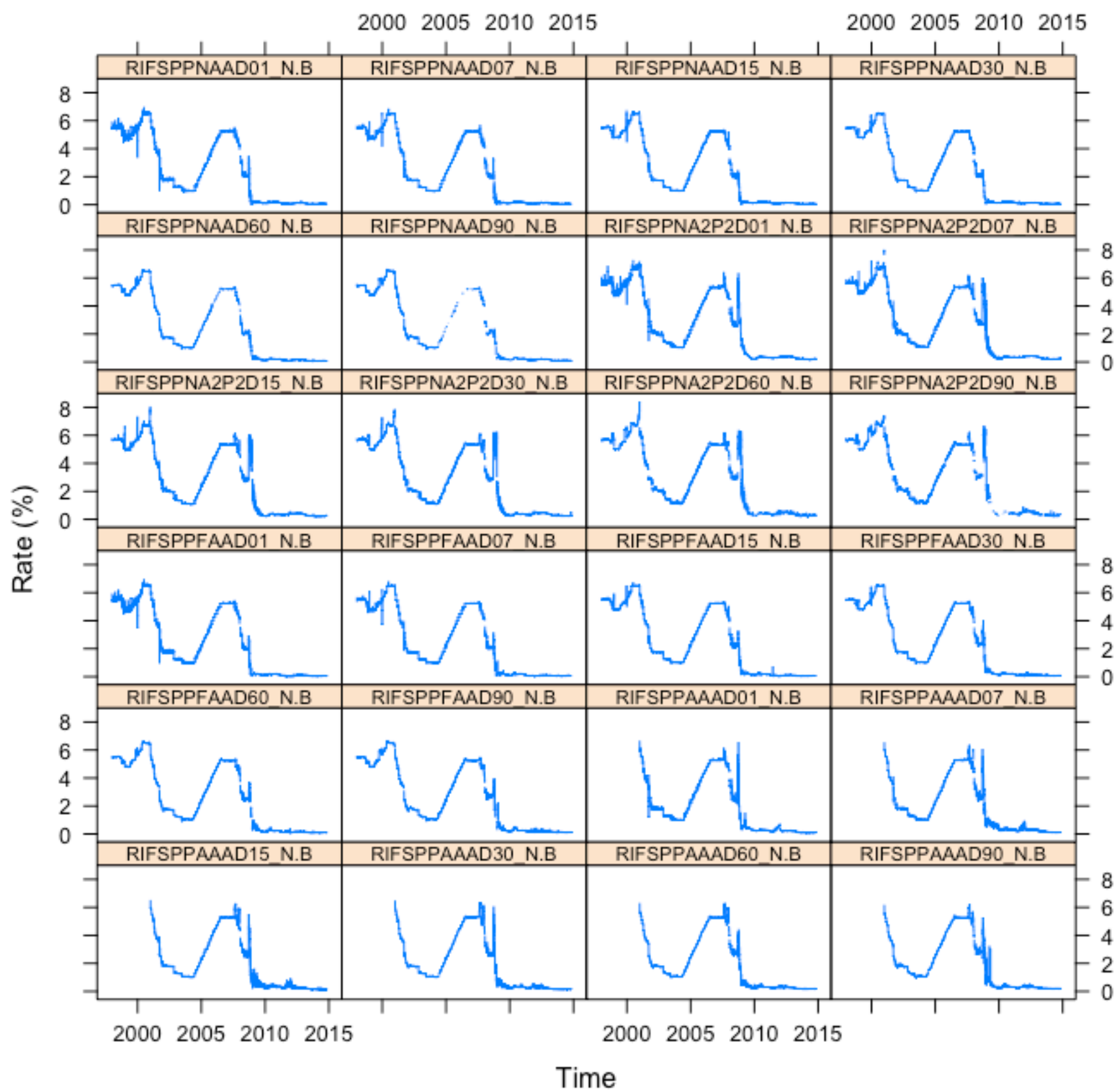
```
require(xts)
```

```
## Loading required package: xts
## Loading required package: zoo
##
## Attaching package: 'zoo'
##
## The following objects are masked from 'package:base':
##
##      as.Date, as.Date.numeric
```

```
require(lattice)
```

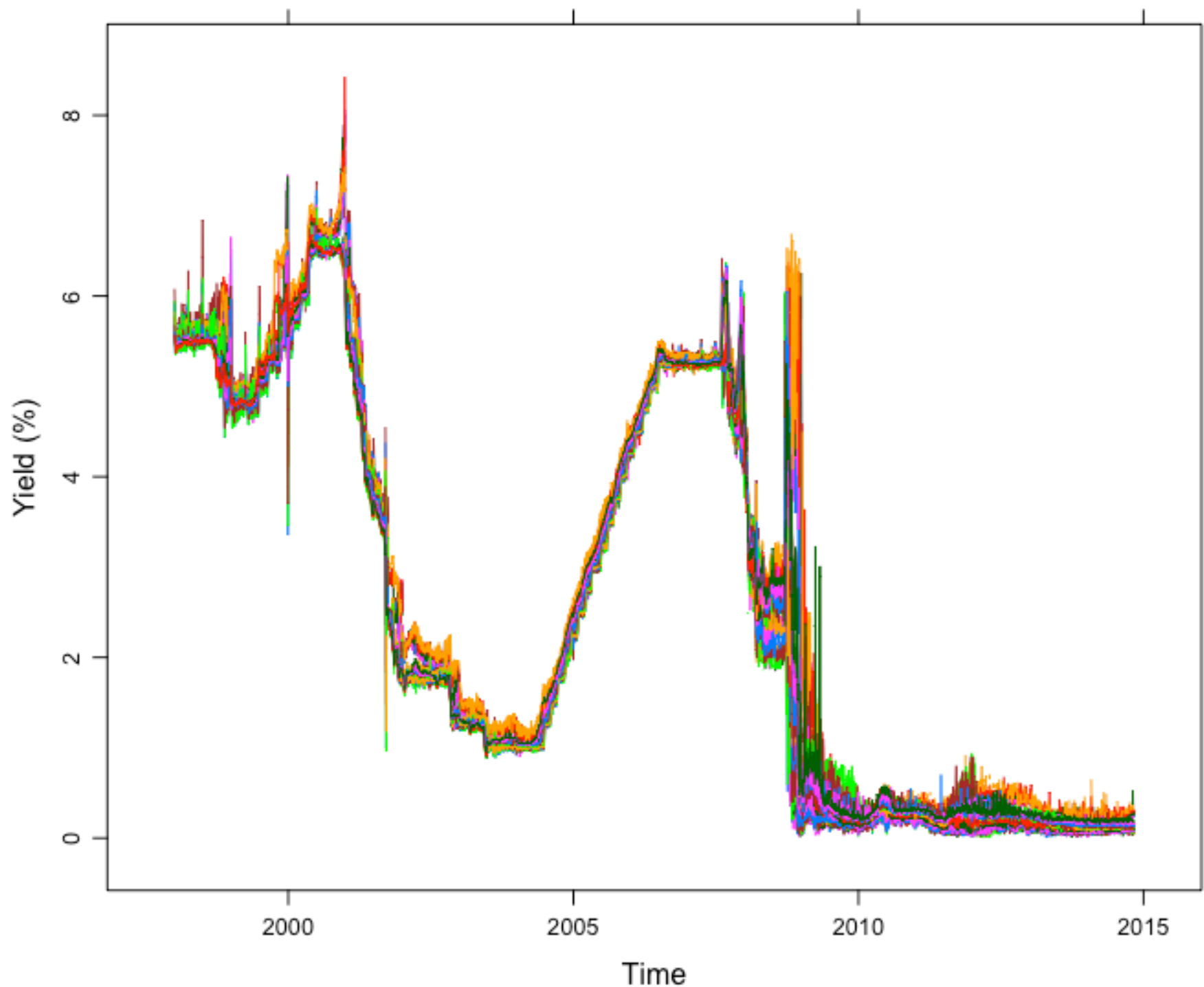
```
## Loading required package: lattice
```

```
df <- mergeSeries(rates)
xt = xts(df,order.by=as.Date(rownames(df)))
xyplot.ts(xt,scales=list(y=list(relation="same")),ylab="Rate (%)",par.strip.text=list(cex=0.7))
```



```
xyplot.ts(xt,superpose=TRUE,auto.key=list(columns=3,cex=0.6),ylab="Yield (%)")
```

RIFSPPNAAD01_N.B	—	RIFSPPNA2P2D15_N.B	—	RIFSPPFAAD60_N.B	—
RIFSPPNAAD07_N.B	—	RIFSPPNA2P2D30_N.B	—	RIFSPPFAAD90_N.B	—
RIFSPPNAAD15_N.B	—	RIFSPPNA2P2D60_N.B	—	RIFSPPAAD01_N.B	—
RIFSPPNAAD30_N.B	—	RIFSPPNA2P2D90_N.B	—	RIFSPPAAD07_N.B	—
RIFSPPNAAD60_N.B	—	RIFSPPFAAD01_N.B	—	RIFSPPAAD15_N.B	—
RIFSPPNAAD90_N.B	—	RIFSPPFAAD07_N.B	—	RIFSPPAAD30_N.B	—
RIFSPPNA2P2D01_N.B	—	RIFSPPFAAD15_N.B	—	RIFSPPAAD60_N.B	—
RIFSPPNA2P2D07_N.B	—	RIFSPPFAAD30_N.B	—	RIFSPPAAD90_N.B	—

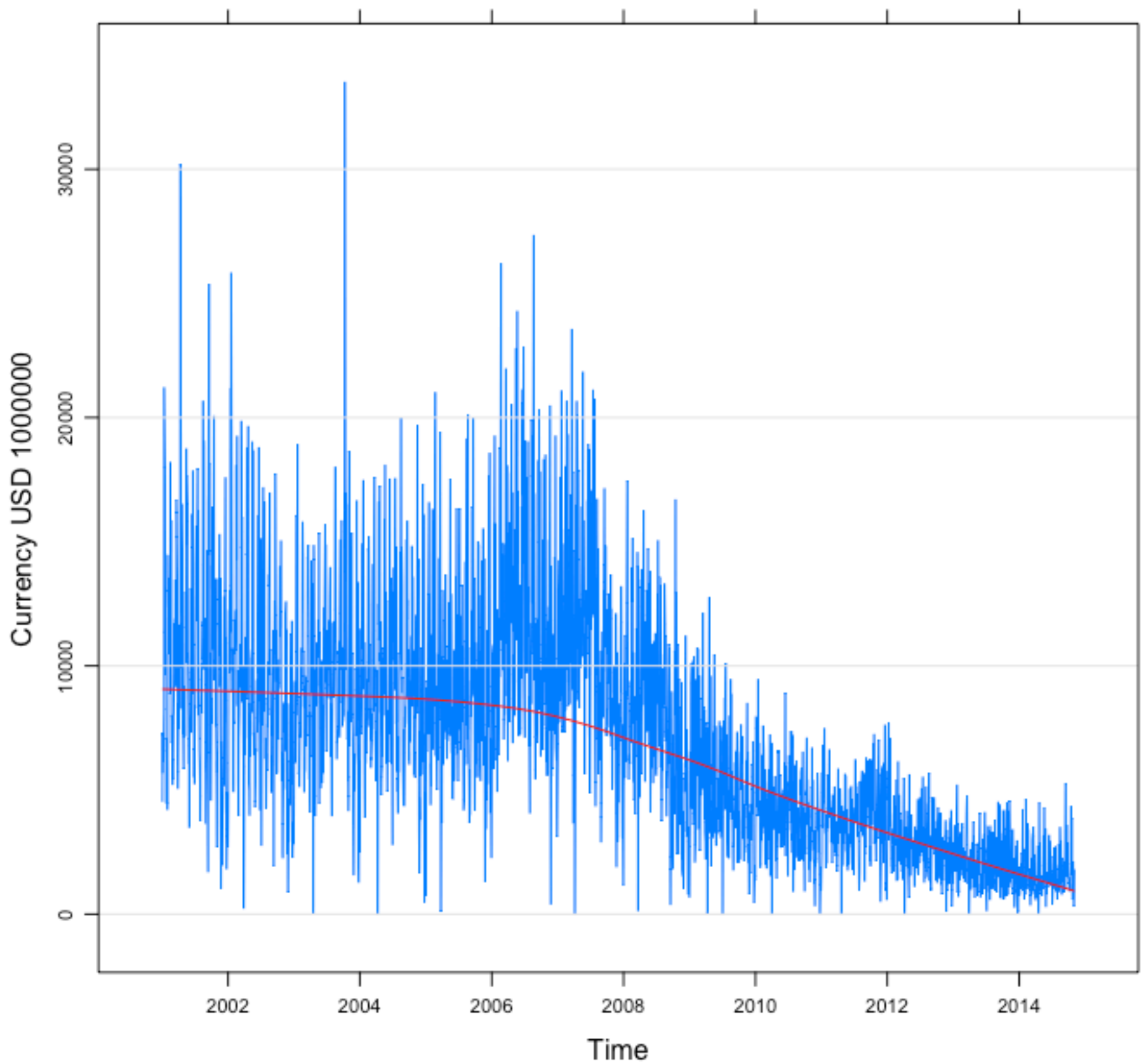


One might also plot data from the volume series, which also contains dollar values:

```
volumes <- getCommercialPaperVolumes(cp, "none")
v = volumes[[35]]
xyplot.ts(na.omit(xts(v$df, order.by=as.Date(rownames(v$df))))),
  ylab=paste(v$unit, v$currency, v$unit_mult),
  scales=list(cex=0.7),
  panel=function(x,...){
    panel.xyplot(x,...)
    panel.grid(-1,0)
    panel.loess(x,col=2,...)},
  main=v$short_desc)
```



## Amount of AA asset-backed commercial paper maturing in 21-40 days



Using `dplyr` and `tidyr` we can easily create some `ggplot2` graphics. Using the year-end series as an example:

```
require(ggplot2)
```

```
## Loading required package: ggplot2
```

```
require(dplyr)
```

```
## Loading required package: dplyr
##
## Attaching package: 'dplyr'
##
## The following objects are masked from 'package:xts':
##
##   first, last
##
## The following object is masked from 'package:stats':
##
##   filter
```

```
##  
## The following objects are masked from 'package:base':  
##  
## intersect, setdiff, setequal, union
```

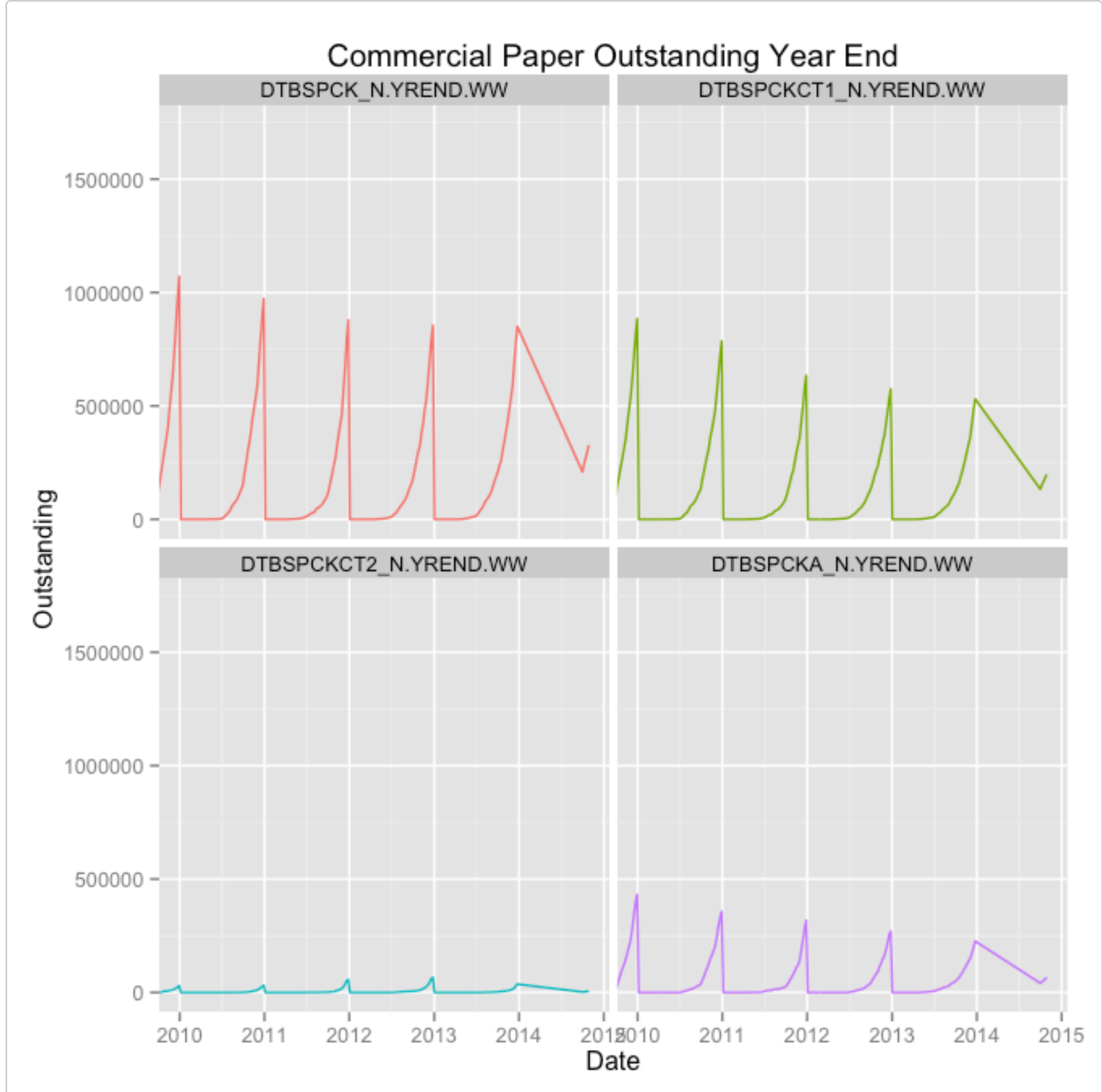
```
require(tidyr)
```

```
## Loading required package: tidyr
```

```
require(scales)
```

```
## Loading required package: scales
```

```
rv = getCommercialPaperYearend(cp, "none")  
df <- mergeSeries(rv)  
df <- df %>%  
  mutate(Date=as.Date(rownames(df))) %>%  
  gather(Product, Outstanding, starts_with("DT"))  
  
p <- ggplot(df, aes(x=Date, y=Outstanding))  
p + geom_line(aes(colour=Product)) +  
  facet_wrap(~Product, ncol=2, scales="fixed") +  
  scale_x_date(limits=c(as.Date("2010-1-1"), max(df$Date))) +  
  theme(legend.position="none") +  
  ggtitle("Commercial Paper Outstanding Year End")
```



## Series Descriptions

RATES is data set with 24 Series:

1. Overnight AA nonfinancial commercial paper rate
2. 7-day AA nonfinancial commercial paper rate
3. 15-day AA nonfinancial commercial paper rate
4. 30-day AA nonfinancial commercial paper rate
5. 60-day AA nonfinancial commercial paper rate
6. 90-day AA nonfinancial commercial paper rate
7. Overnight A2/P2 nonfinancial commercial paper rate
8. 7-day A2/P2 nonfinancial commercial paper rate
9. 15-day A2/P2 nonfinancial commercial paper rate
10. 30-day A2/P2 nonfinancial commercial paper rate
11. 60-day A2/P2 nonfinancial commercial paper rate
12. 90-day A2/P2 nonfinancial rate
13. Overnight AA financial commercial paper rate
14. 7-day AA financial commercial paper rate
15. 15-day AA financial commercial paper rate
16. 30-day AA financial commercial paper rate



17. 60-day AA financial commercial paper rate
18. 90-day AA financial commercial paper rate
19. Overnight AA asset-backed commercial paper rate
20. 7-day AA asset-backed commercial paper rate
21. 15-day AA asset-backed commercial paper rate
22. 30-day AA asset-backed commercial paper rate
23. 60-day AA asset-backed commercial paper rate
24. 90-day AA asset-backed commercial paper rate

VOL is data set with 60 Series

1. Amount of AA nonfinancial commercial paper maturing in 1-4 days
2. Amount of A2/P2 nonfinancial commercial paper maturing in 1-4 days
3. Amount of AA financial commercial paper maturing in 1-4 days
4. Amount of AA asset-backed commercial paper maturing in 1-4 days
5. Amount of commercial paper maturing in 1-4 days
6. Number of issues of AA nonfinancial commercial paper maturing in 1-4 days
7. Number of issues of A2/P2 nonfinancial commercial paper maturing in 1-4 days
8. Number of issues of AA financial commercial paper maturing in 1-4 days
9. Number of issues of AA asset-backed commercial paper maturing in 1-4 days
10. Number of issues of commercial paper maturing in 1-4 days
11. Amount of AA nonfinancial commercial paper maturing in 5-9 days
12. Amount of A2/P2 nonfinancial commercial paper maturing in 5-9 days
13. Amount of AA financial commercial paper maturing in 5-9 days
14. Amount of AA asset-backed commercial paper maturing in 5-9 days
15. Amount of commercial paper maturing in 5-9 days
16. Number of issues of AA nonfinancial commercial paper maturing in 5-9 days
17. Number of issues of A2/P2 nonfinancial commercial paper maturing in 5-9 days
18. Number of issues of AA financial commercial paper maturing in 5-9 days
19. Number of issues of AA asset-backed commercial paper maturing in 5-9 days
20. Number of issues of commercial paper maturing in 5-9 days
21. Amount of AA nonfinancial commercial paper maturing in 10-20 days
22. Amount of A2/P2 nonfinancial commercial paper maturing in 10-20 days
23. Amount of AA financial commercial paper maturing in 10-20 days
24. Amount of AA asset-backed commercial paper maturing in 10-20 days
25. Amount of commercial paper maturing in 10-20 days
26. Number of issues of AA nonfinancial commercial paper maturing in 10-20 days
27. Number of issues of A2/P2 nonfinancial commercial paper maturing in 10-20 days
28. Number of issues of AA financial commercial paper maturing in 10-20 days
29. Number of issues of AA asset-backed commercial paper maturing in 10-20 days
30. Number of issues of commercial paper maturing in 10-20 days
31. Amount of AA nonfinancial commercial paper maturing in 21-40 days
32. Amount of A2/P2 nonfinancial commercial paper maturing in 21-40 days
33. Amount of AA financial commercial paper maturing in 21-40 days
34. Amount of AA asset-backed commercial paper maturing in 21-40 days
35. Amount of commercial paper maturing in 21-40 days
36. Number of issues of AA nonfinancial commercial paper maturing in 21-40 days
37. Number of issues of A2/P2 nonfinancial commercial paper maturing in 21-40 days
38. Number of issues of AA financial commercial paper maturing in 21-40 days
39. Number of issues of AA asset-backed commercial paper maturing in 21-40 days
40. Number of issues of commercial paper maturing in 21-40 days
41. Amount of AA nonfinancial commercial paper maturing in 41-80 days
42. Amount of A2/P2 nonfinancial commercial paper maturing in 41-80 days
43. Amount of AA financial commercial paper maturing in 41-80 days
44. Amount of AA asset-backed commercial paper maturing in 41-80 days
45. Amount of commercial paper maturing in 41-80 days
46. Number of issues of AA nonfinancial commercial paper maturing in 41-80 days
47. Number of issues of A2/P2 nonfinancial commercial paper maturing in 41-80 days
48. Number of issues of AA financial commercial paper maturing in 41-80 days
49. Number of issues of AA asset-backed commercial paper maturing in 41-80 days

50. Number of issues of commercial paper maturing in 41-80 days
51. Amount of AA nonfinancial commercial paper maturing in greater than 80 days
52. Amount of A2/P2 nonfinancial commercial paper maturing in greater than 80 days
53. Amount of AA financial commercial paper maturing in greater than 80 days
54. Amount of AA asset-backed commercial paper maturing in greater than 80 days
55. Amount of commercial paper maturing in greater than 80 days
56. Number of issues of AA nonfinancial commercial paper maturing in greater than 80 days
57. Number of issues of A2/P2 nonfinancial commercial paper maturing in greater than 80 days
58. Number of issues of AA financial commercial paper maturing in greater than 80 days
59. Number of issues of AA asset-backed commercial paper maturing in greater than 80 days
60. Number of issues of commercial paper maturing in greater than 80 days

OUTST is data set with 77 Series

1. Total commercial paper outstanding; seasonally adjusted
2. Nonfinancial commercial paper outstanding; seasonally adjusted
3. Nonfinancial domestic commercial paper outstanding; seasonally adjusted
4. Nonfinancial foreign commercial paper outstanding; seasonally adjusted
5. Nonfinancial other commercial paper outstanding; seasonally adjusted
6. Financial commercial paper outstanding; seasonally adjusted
7. Financial domestic commercial paper outstanding; seasonally adjusted
8. Financial foreign commercial paper outstanding; seasonally adjusted
9. Financial other commercial paper outstanding; seasonally adjusted
10. Asset-backed commercial paper outstanding; seasonally adjusted
11. Other commercial paper outstanding; seasonally adjusted
12. Total commercial paper outstanding
13. Nonfinancial commercial paper outstanding
14. Nonfinancial domestic commercial paper outstanding
15. Nonfinancial foreign commercial paper outstanding
16. Nonfinancial other commercial paper outstanding
17. Financial commercial paper outstanding
18. Financial domestic commercial paper outstanding
19. Financial domestic commercial paper outstanding, U.S. owned
20. Financial domestic commercial paper outstanding, foreign bank parent
21. Financial domestic commercial paper outstanding, foreign nonbank parent
22. Financial domestic commercial paper outstanding, other
23. Financial foreign commercial paper outstanding
24. Financial foreign commercial paper outstanding, bank or bank holding company
25. Financial foreign commercial paper outstanding, other
26. Financial other commercial paper outstanding
27. Asset-backed commercial paper outstanding
28. Other commercial paper outstanding
29. SEC rule 2a-7 tier-1 commercial paper outstanding
30. SEC rule 2a-7 tier-2 commercial paper outstanding
31. Dealer placed nonfinancial commercial paper outstanding
32. Dealer placed financial commercial paper outstanding
33. Dealer placed asset-backed commercial paper outstanding
34. Dealer placed other commercial paper outstanding
35. Directly placed nonfinancial commercial paper outstanding
36. Directly placed financial commercial paper outstanding
37. Directly placed asset-backed commercial paper outstanding
38. Directly placed other commercial paper outstanding
39. Total commercial paper outstanding; seasonally adjusted
40. Nonfinancial commercial paper outstanding; seasonally adjusted
41. Nonfinancial domestic commercial paper outstanding; seasonally adjusted
42. Nonfinancial foreign commercial paper outstanding; seasonally adjusted
43. Nonfinancial other commercial paper outstanding; seasonally adjusted
44. Financial commercial paper outstanding; seasonally adjusted
45. Financial domestic commercial paper outstanding; seasonally adjusted
46. Financial foreign commercial paper outstanding; seasonally adjusted

47. Financial other commercial paper outstanding; seasonally adjusted
48. Asset-backed commercial paper outstanding; seasonally adjusted
49. Other commercial paper outstanding; seasonally adjusted
50. Total commercial paper outstanding
51. Nonfinancial commercial paper outstanding
52. Nonfinancial domestic commercial paper outstanding
53. Nonfinancial foreign commercial paper outstanding
54. Nonfinancial other commercial paper outstanding
55. Financial commercial paper outstanding
56. Financial domestic commercial paper outstanding
57. Financial domestic commercial paper outstanding, U.S. owned
58. Financial domestic commercial paper outstanding, foreign bank parent
59. Financial domestic commercial paper outstanding, foreign nonbank parent
60. Financial domestic commercial paper outstanding, other
61. Financial foreign commercial paper outstanding
62. Financial foreign commercial paper outstanding, bank or bank holding company
63. Financial foreign commercial paper outstanding, other
64. Financial other commercial paper outstanding
65. Asset-backed commercial paper outstanding
66. Other commercial paper outstanding
67. L.O.C. (letter of credit)-backed commercial paper outstanding
68. SEC rule 2a-7 tier-1 commercial paper outstanding
69. SEC rule 2a-7 tier-2 commercial paper outstanding
70. Dealer placed nonfinancial commercial paper outstanding
71. Dealer placed financial commercial paper outstanding
72. Dealer placed asset-backed commercial paper outstanding
73. Dealer placed other commercial paper outstanding
74. Directly placed nonfinancial commercial paper outstanding
75. Directly placed financial commercial paper outstanding
76. Directly placed asset-backed commercial paper outstanding
77. Directly placed other commercial paper outstanding

OUTST\_YREND is data set with 4 Series

1. Total commercial paper outstanding, maturing after December 31
2. SEC rule 2a-7 tier-1 commercial paper outstanding, maturing after December 31
3. SEC rule 2a-7 tier-2 commercial paper outstanding, maturing after December 31
4. Asset-backed commercial paper outstanding, maturing after December 31

OUTST\_OLD is data set with 25 Series

1. Total commercial paper outstanding; seasonally adjusted
2. Nonfinancial commercial paper outstanding; seasonally adjusted
3. Nonfinancial domestic commercial paper outstanding; seasonally adjusted
4. Nonfinancial foreign commercial paper outstanding; seasonally adjusted
5. Financial (including asset-backed) commercial paper outstanding; seasonally adjusted
6. Financial (including asset-backed) domestic commercial paper outstanding; seasonally adjusted
7. Financial (including asset-backed) foreign commercial paper outstanding; seasonally adjusted
8. Total commercial paper outstanding
9. Nonfinancial commercial paper outstanding
10. Nonfinancial domestic commercial paper outstanding
11. Nonfinancial foreign commercial paper outstanding
12. Financial (including asset-backed) commercial paper outstanding
13. Financial (including asset-backed) domestic commercial paper outstanding
14. Financial (including asset-backed) domestic commercial paper outstanding, U.S. owned
15. Financial (including asset-backed) domestic commercial paper outstanding, foreign bank parent
16. Financial (including asset-backed) domestic commercial paper outstanding, foreign nonbank parent
17. Financial (including asset-backed) foreign commercial paper outstanding
18. Financial (including asset-backed) foreign commercial paper outstanding, bank or bank holding company
19. Financial (including asset-backed) foreign commercial paper outstanding, other

20. Asset-backed commercial paper outstanding
21. L.O.C. (letter of credit)-backed commercial paper outstanding
22. SEC rule 2a-7 tier-1 commercial paper outstanding
23. SEC rule 2a-7 tier-2 commercial paper outstanding
24. Directly placed nonfinancial commercial paper outstanding
25. Directly placed financial commercial paper outstanding

RATES\_OLD is data set with 12 Series

1. Overnight directly placed financial commercial paper rate
2. 7-day directly placed financial commercial paper rate
3. 3 15-day directly placed financial commercial paper rate
4. 4 30-day directly placed financial commercial paper rate
5. 5 60-day directly placed financial commercial paper rate
6. 6 90-day directly placed financial commercial paper rate
7. 7 Overnight dealer placed AA commercial paper rate
8. 7-day dealer placed AA commercial paper rate
9. 15-day dealer placed AA commercial paper rate
10. 30-day dealer placed AA commercial paper rate
11. 60-day dealer placed AA commercial paper rate
12. 90-day dealer placed AA commercial paper rate

# References

- [US Federal Reserve Bank](#)