Stock Benchmark

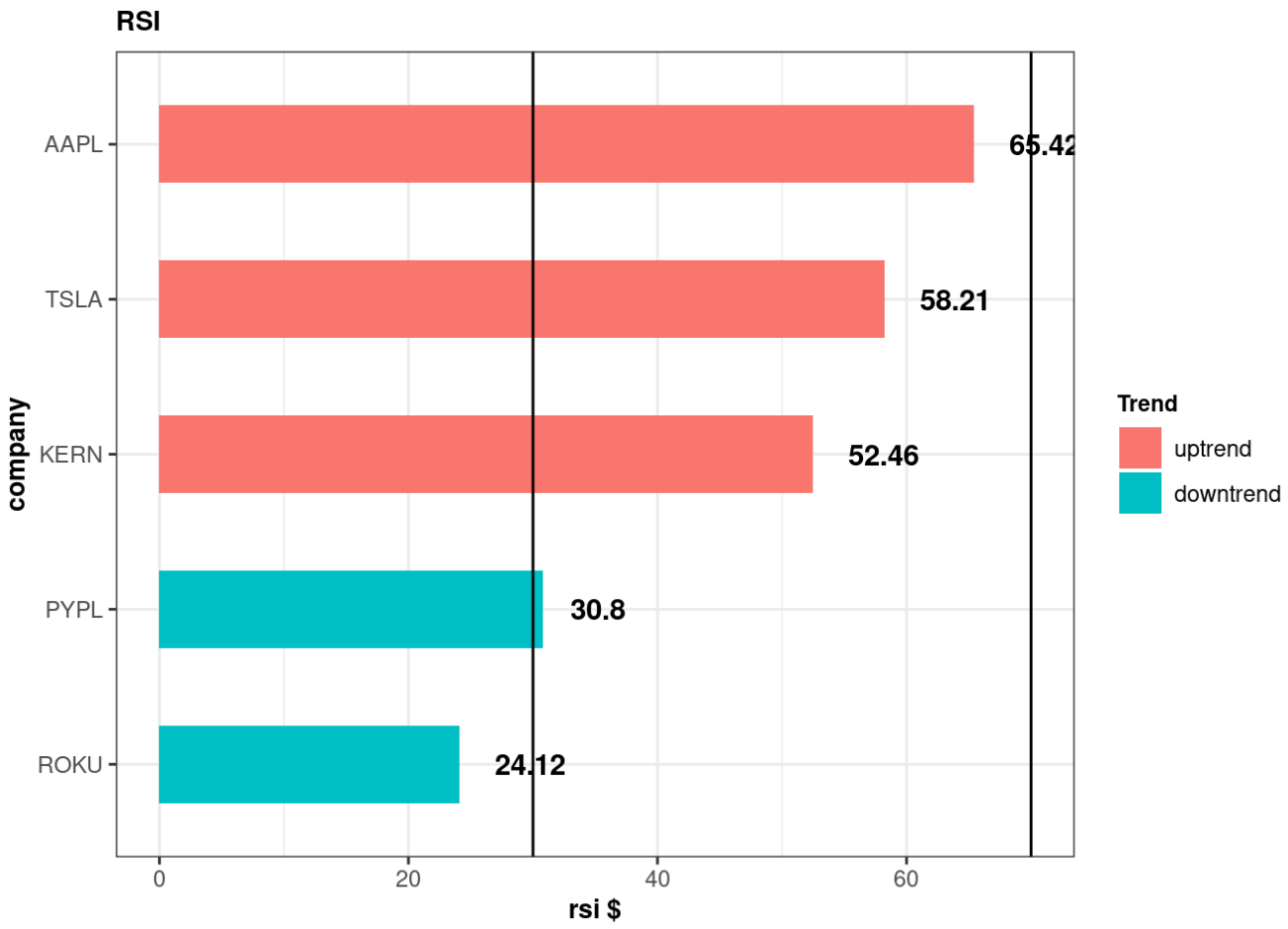
Giorgos Anastasakos

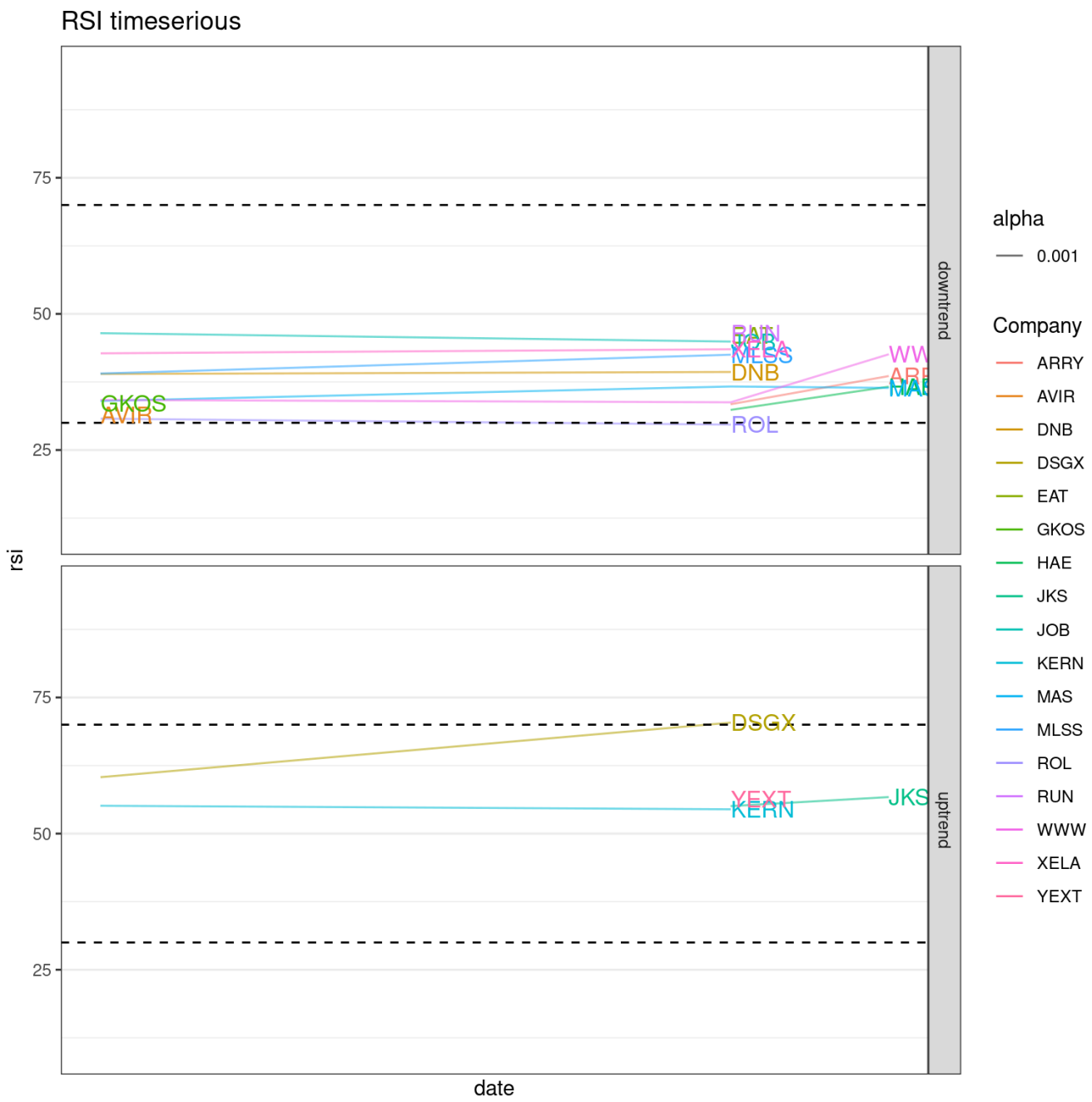
```
## [1] "2021-11-17 21:34:54 EET"
```

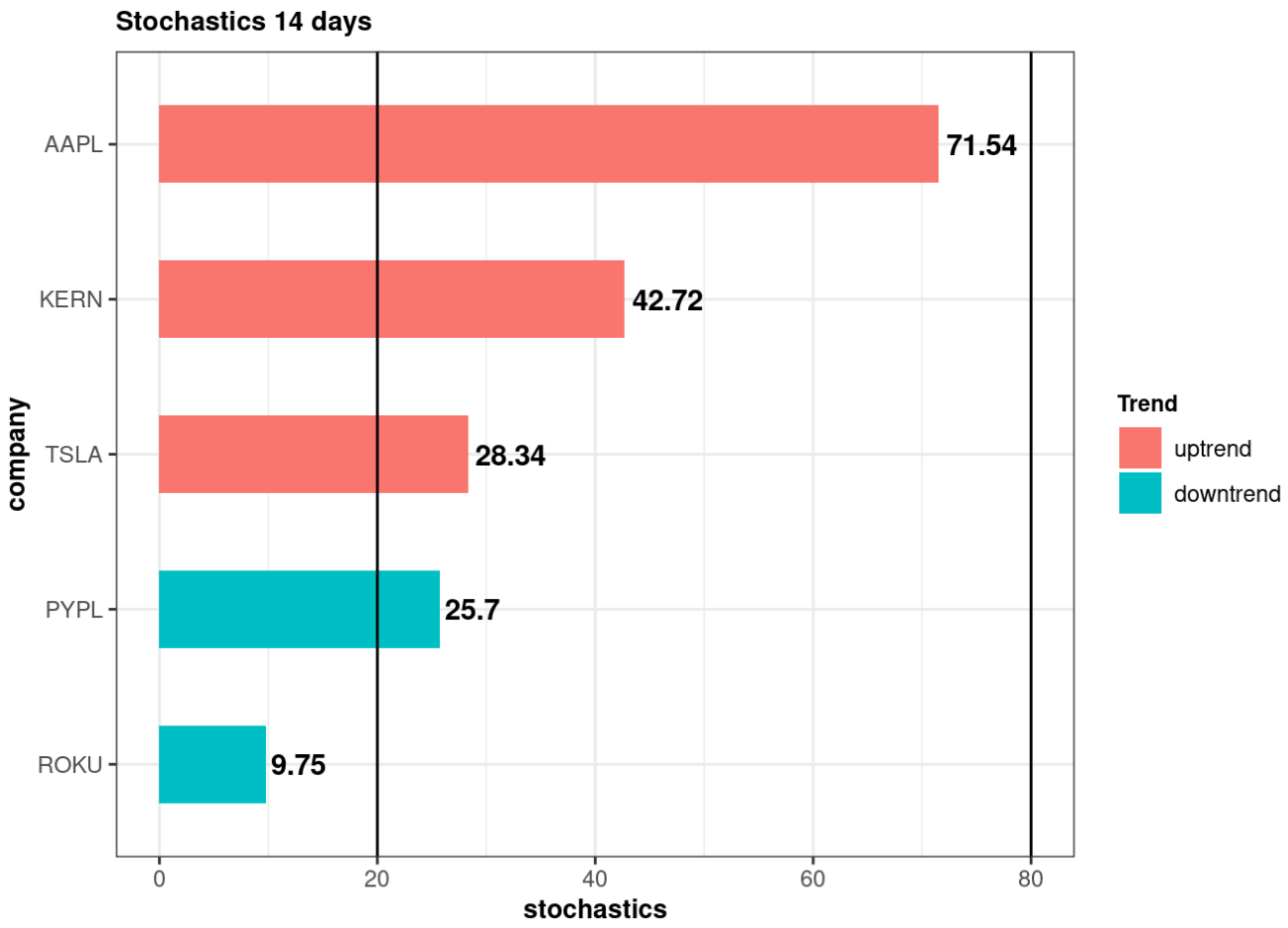
```
## noNotes
```

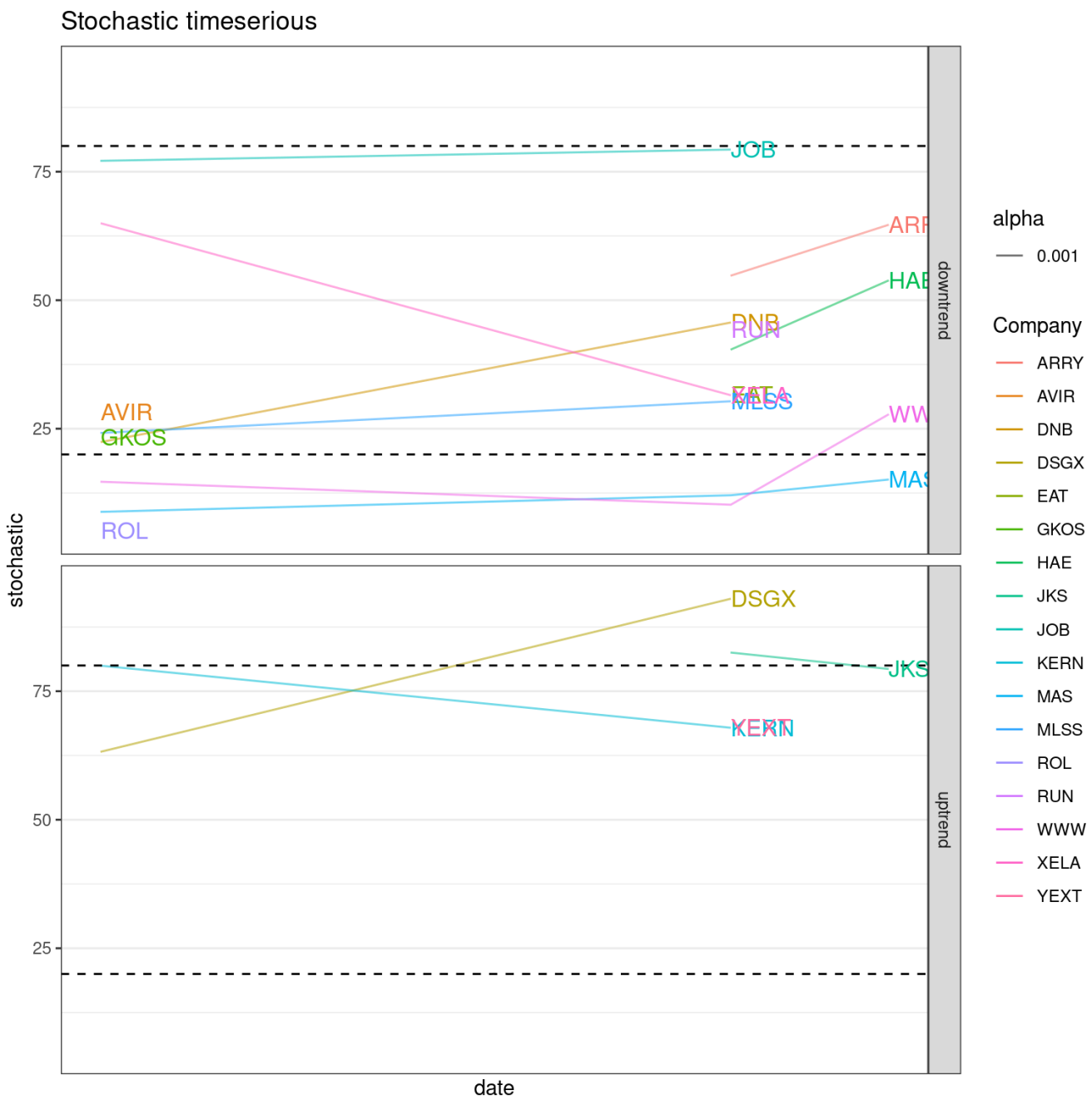
```
## [1] "no:  1 -------------gia tin etairia--------------  AAPL"
## [1] "no:  2 -------------gia tin etairia--------------  TSLA"
## [1] "no:  3 -------------gia tin etairia--------------  KERN"
## [1] "no:  4 -------------gia tin etairia--------------  ROKU"
## [1] "no:  5 -------------gia tin etairia--------------  PYPL"
```

```
## [1] "/home/giorgos/Desktop"
```



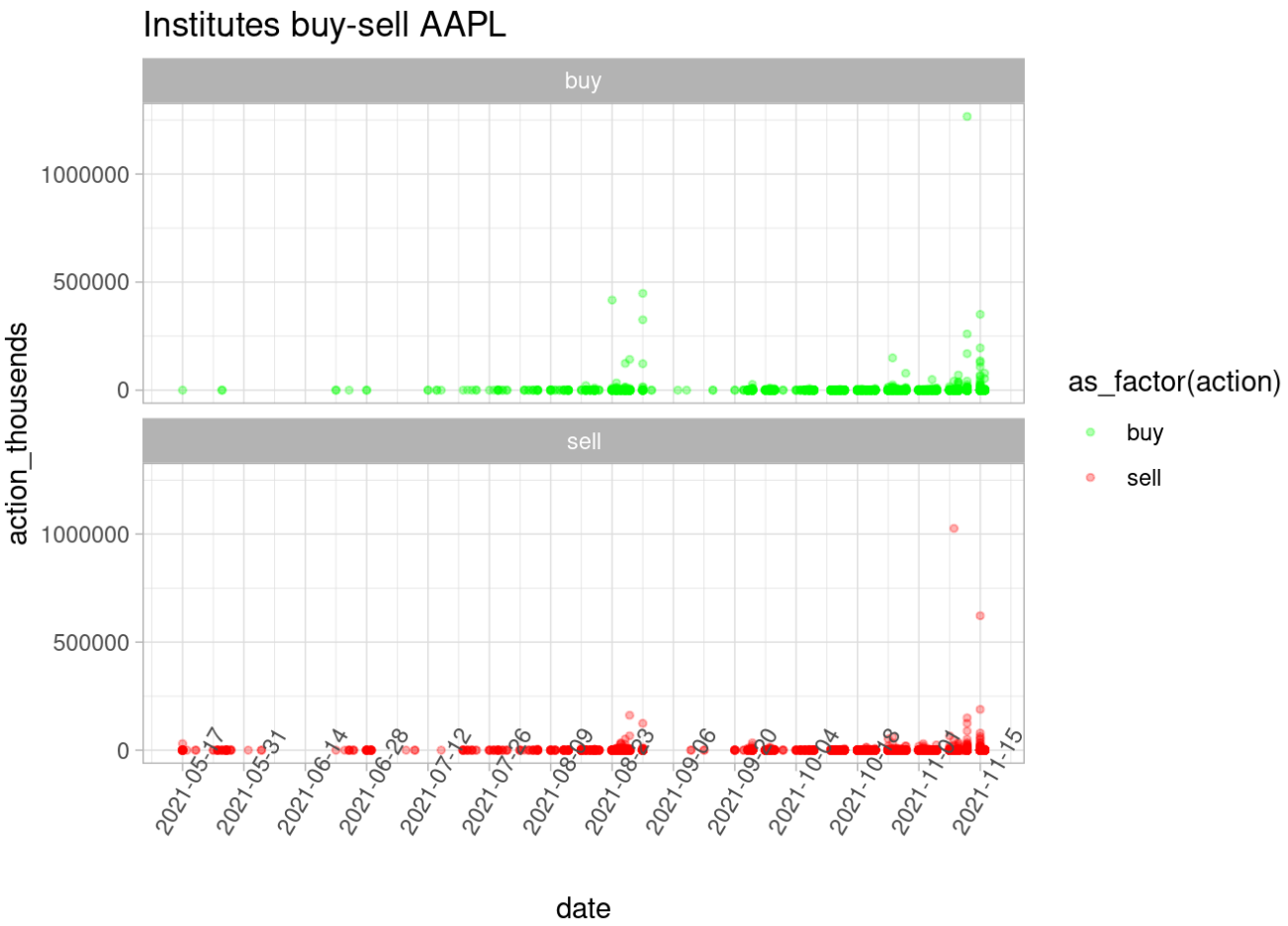

RSI timeserious
rsi
date
75
50
25
downtrend
uptrend
GKOS
AVIR
DNB
ROL
DSGX
KERN
JKS
alpha
0.001
Company
ARRY
AVIR
DNB
DSGX
EAT
GKOS
HAE
JKS
JOB
KERN
MAS
MLSS
ROL
RUN
WWW
XELA
YEXT


Stochastics 14 days
AAPL
KERN
TSLA
PYPL
ROKU
company
71.54
42.72
28.34
25.7
9.75
0
20
40
60
80
stochastics
Trend
uptrend
downtrend

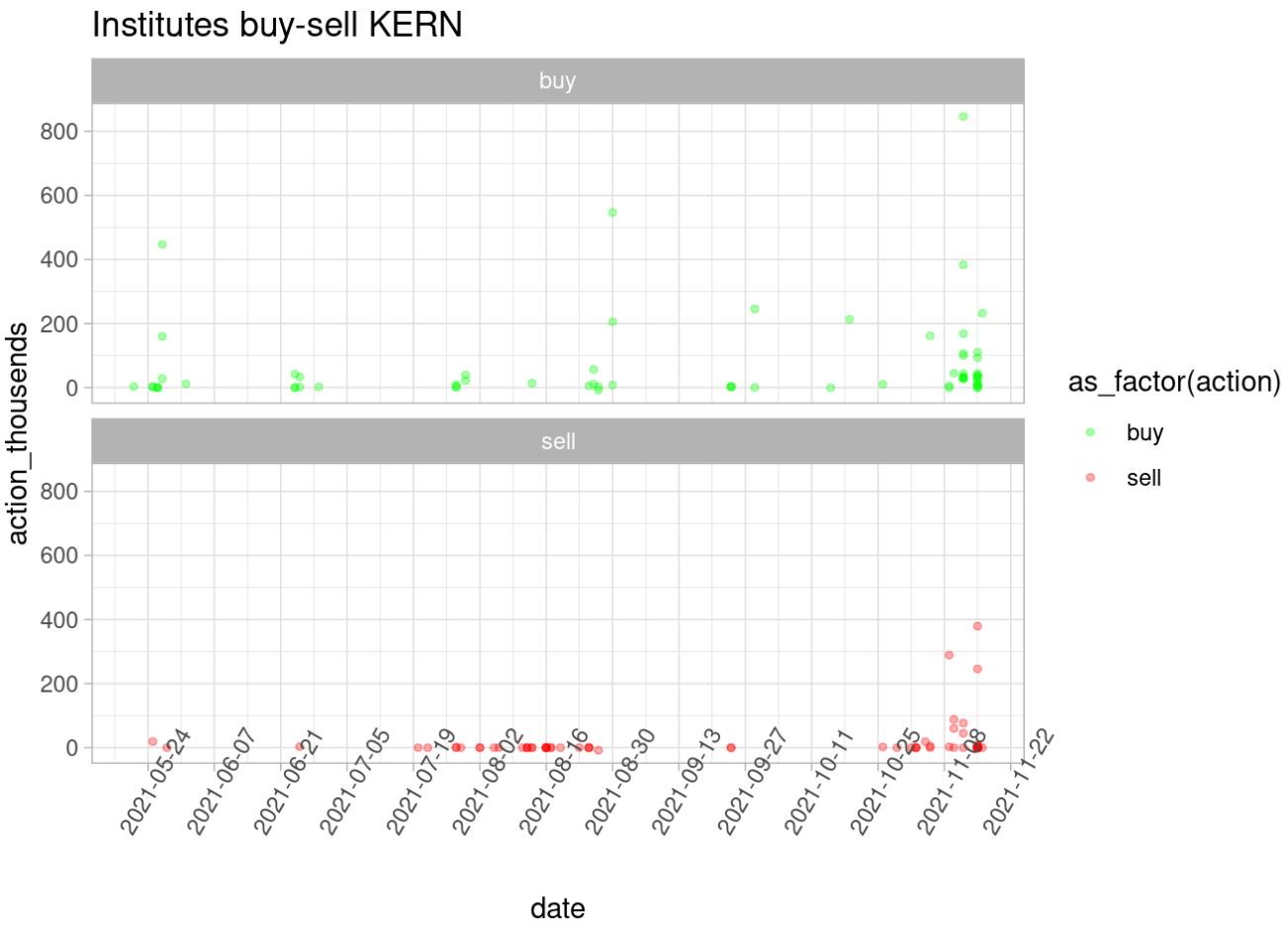


Institutes BUY-SELL

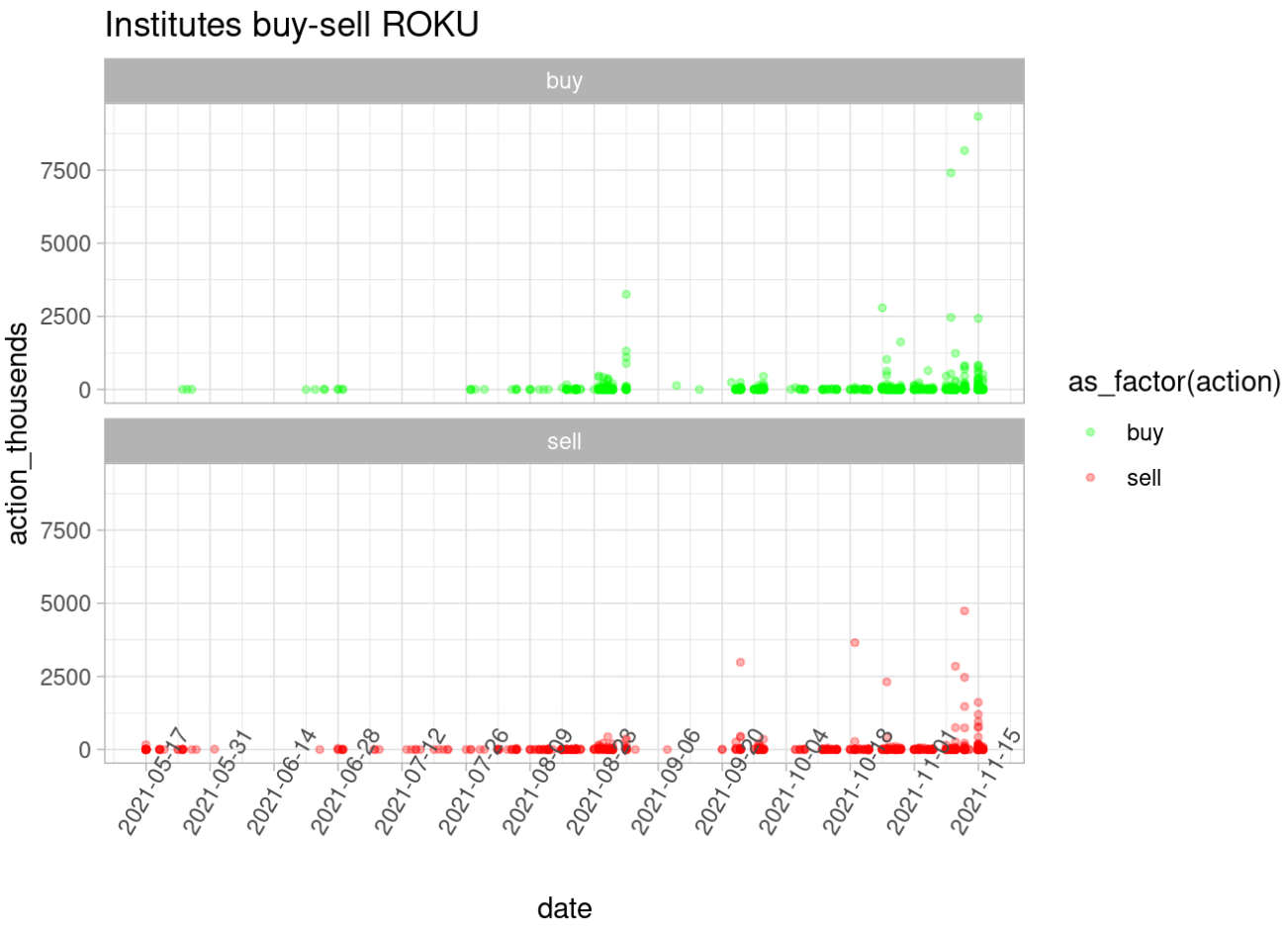
```
##  chr [1:3179] "Shares" "" "147,301" "33,966" "124,100" "485,156" "115,833" ...
##  num [1:3179] NA NA 147301 33966 124100 ...
```



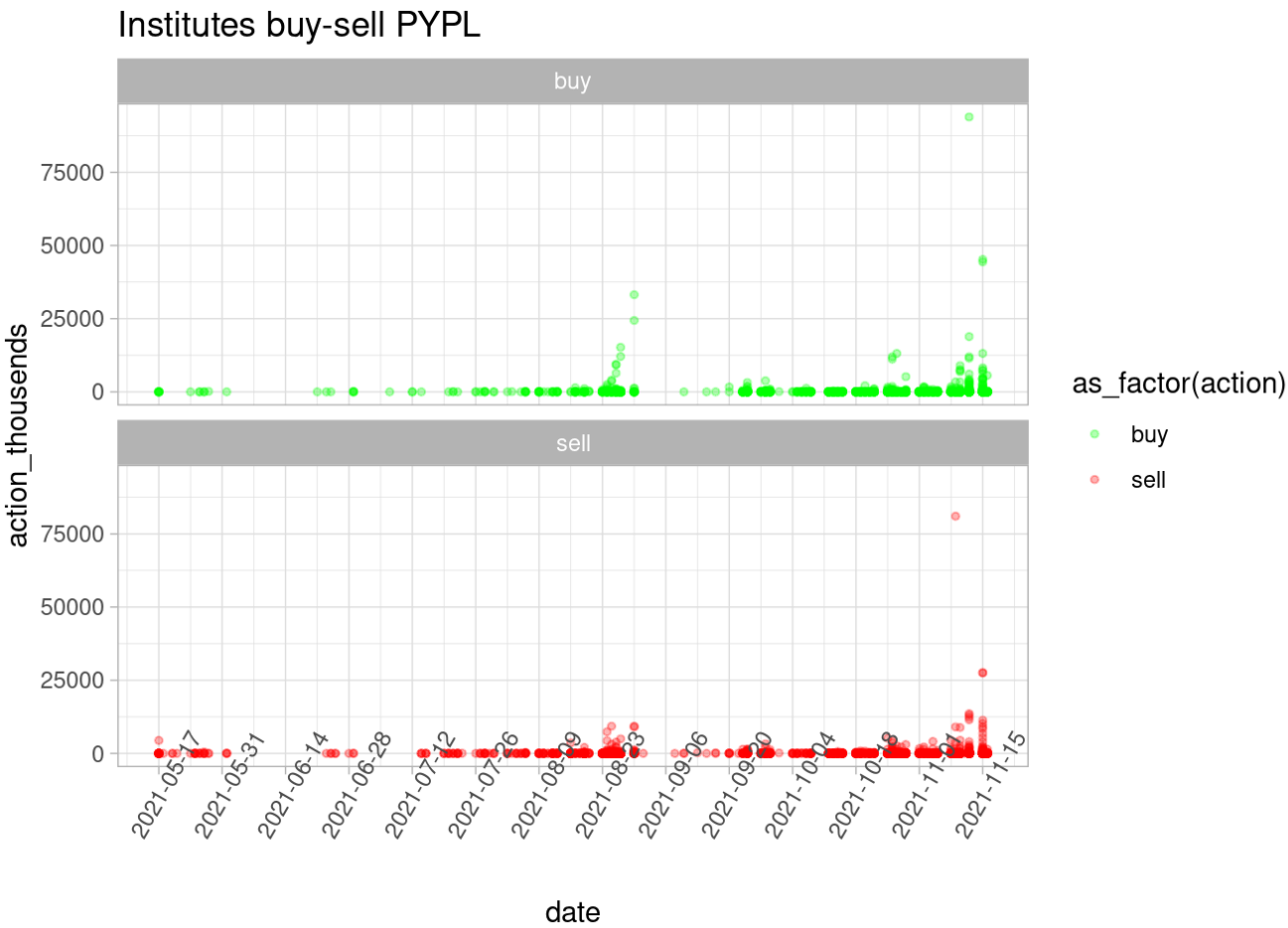

```
##  chr [1:80] "Shares" "0" "0" "0" "18,650" "76,480" "0" "0" "0" "0" "0" "0" ...
##  num [1:80] NA 0 0 0 18650 ...
```



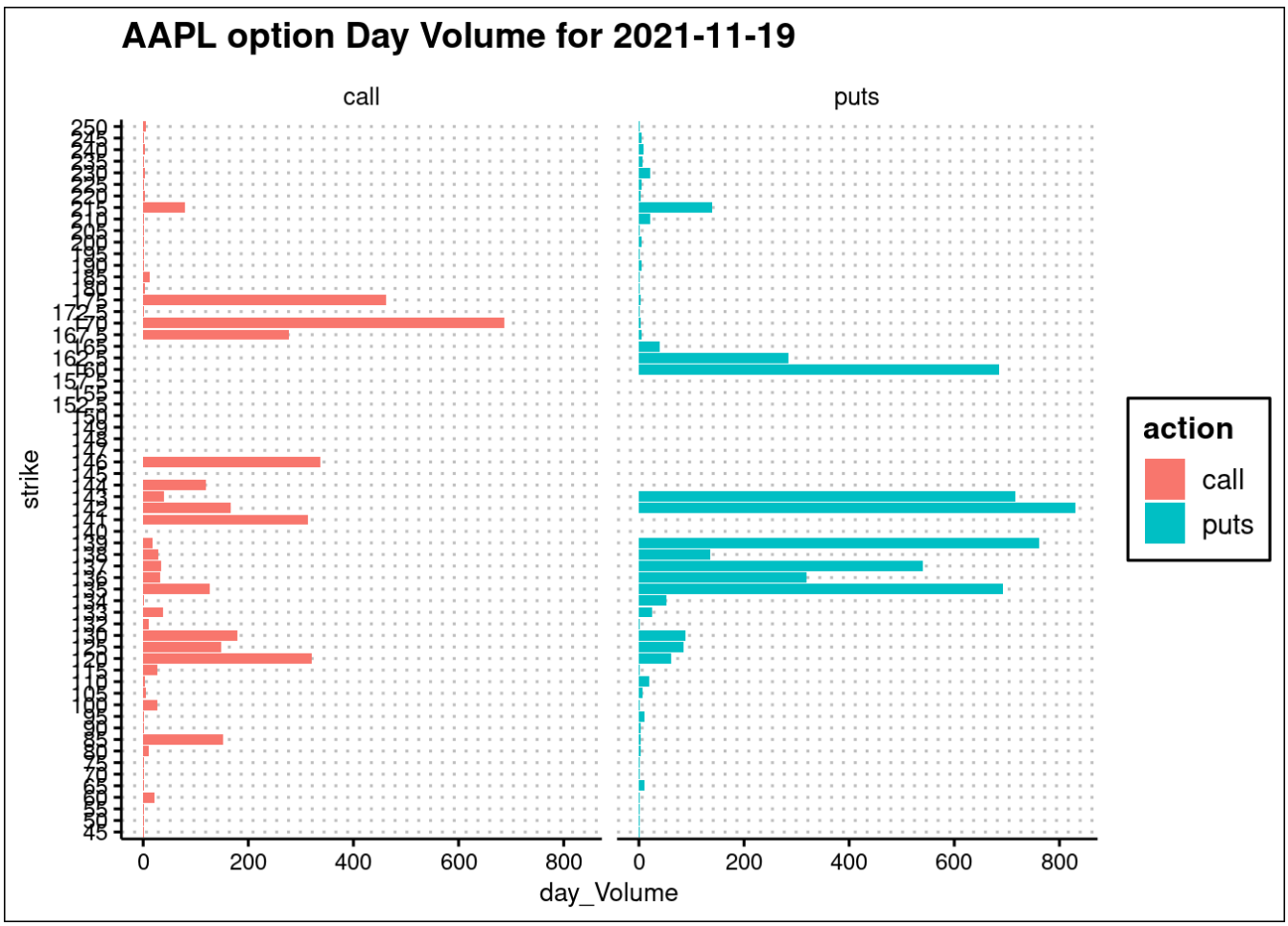

```
##  chr [1:736] "Shares" "1,914" "0" "1,368" "253,024" "" "0" "60,511" "0" ...
##  num [1:736] NA 1914 0 1368 253024 ...
```

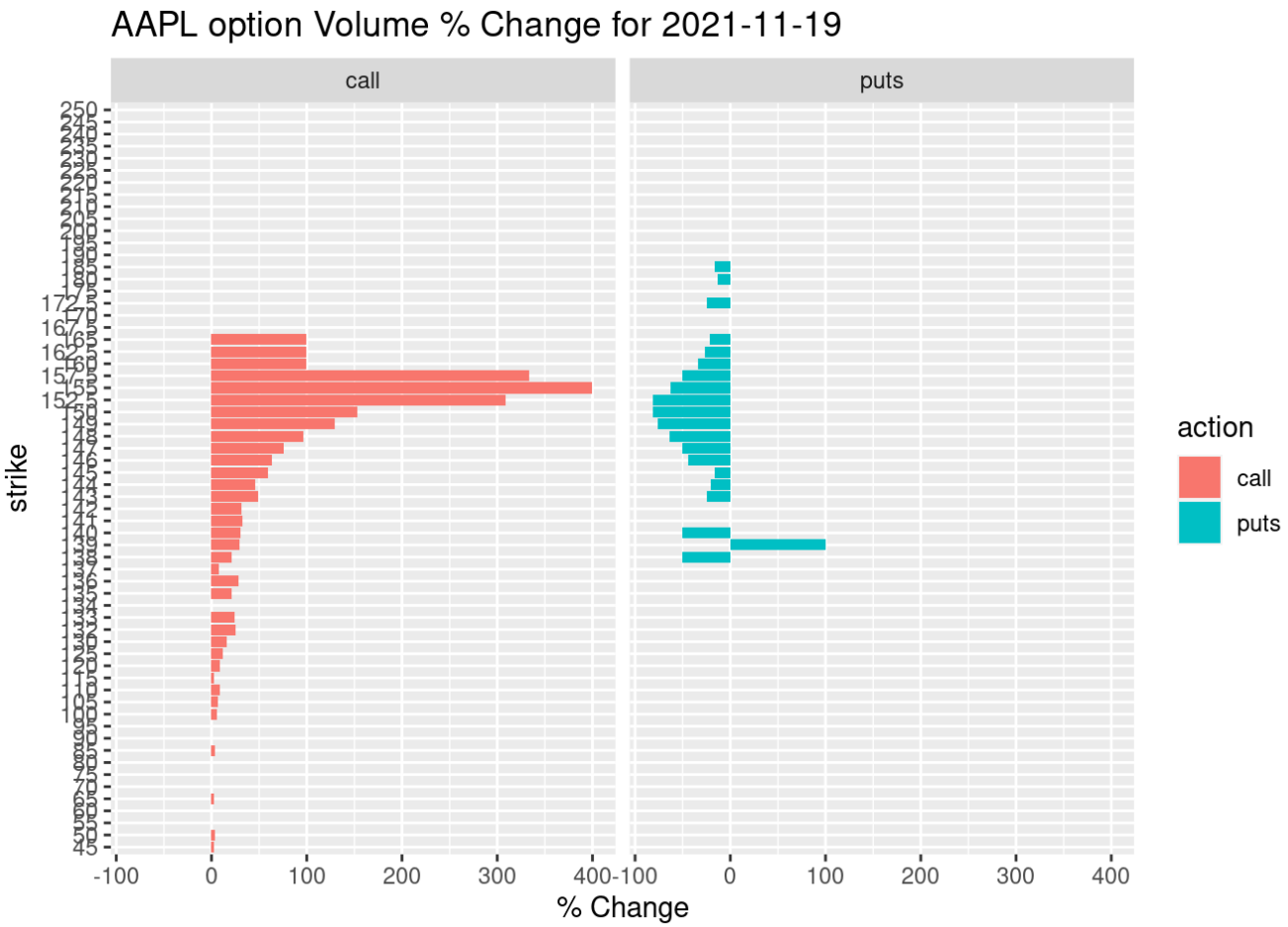


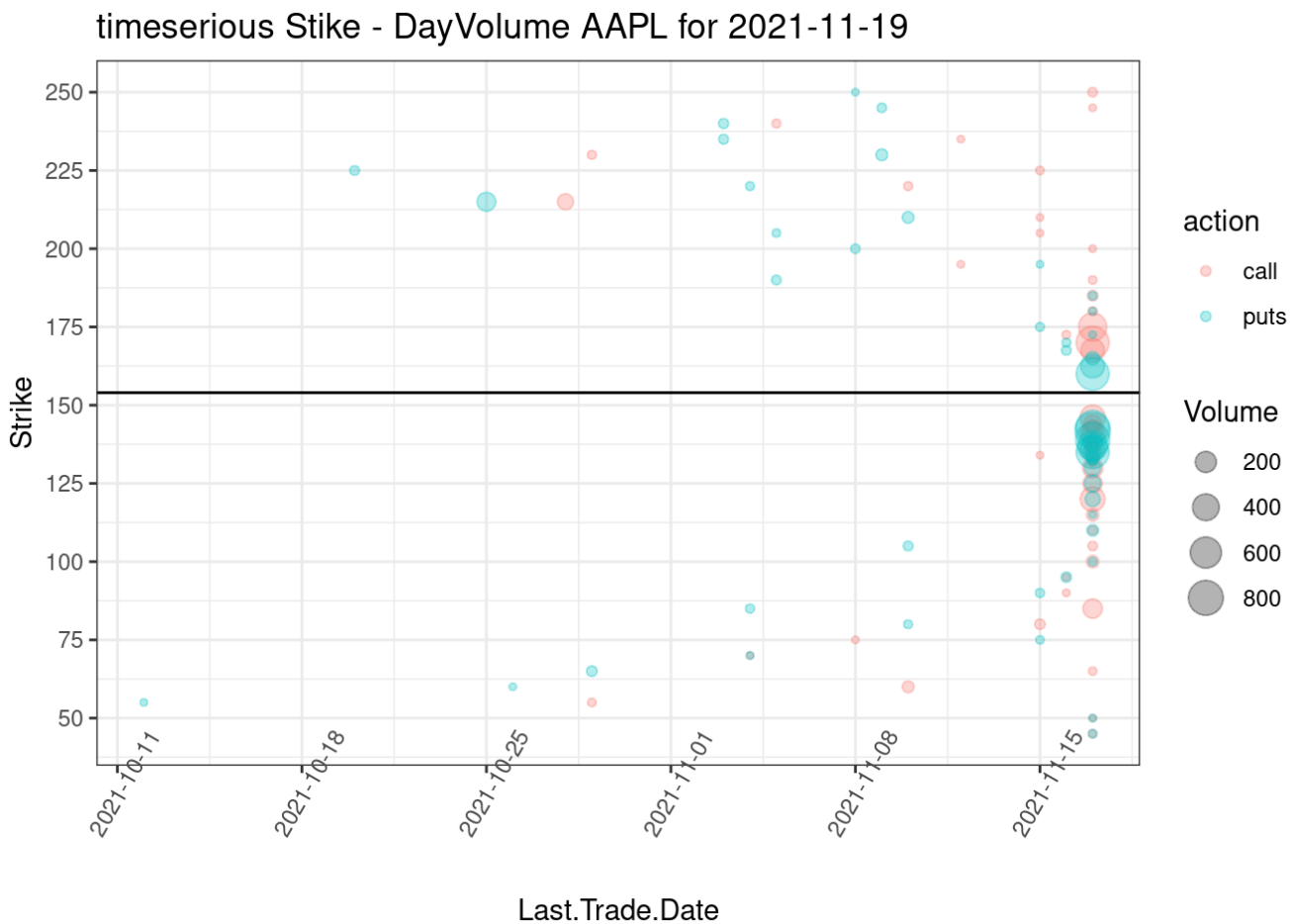

```
##  chr [1:1896] "Shares" "1,732" "110" "111,175" "380,302" "0" "69,273" ...
##  num [1:1896] NA 1732 110 111175 380302 ...
```

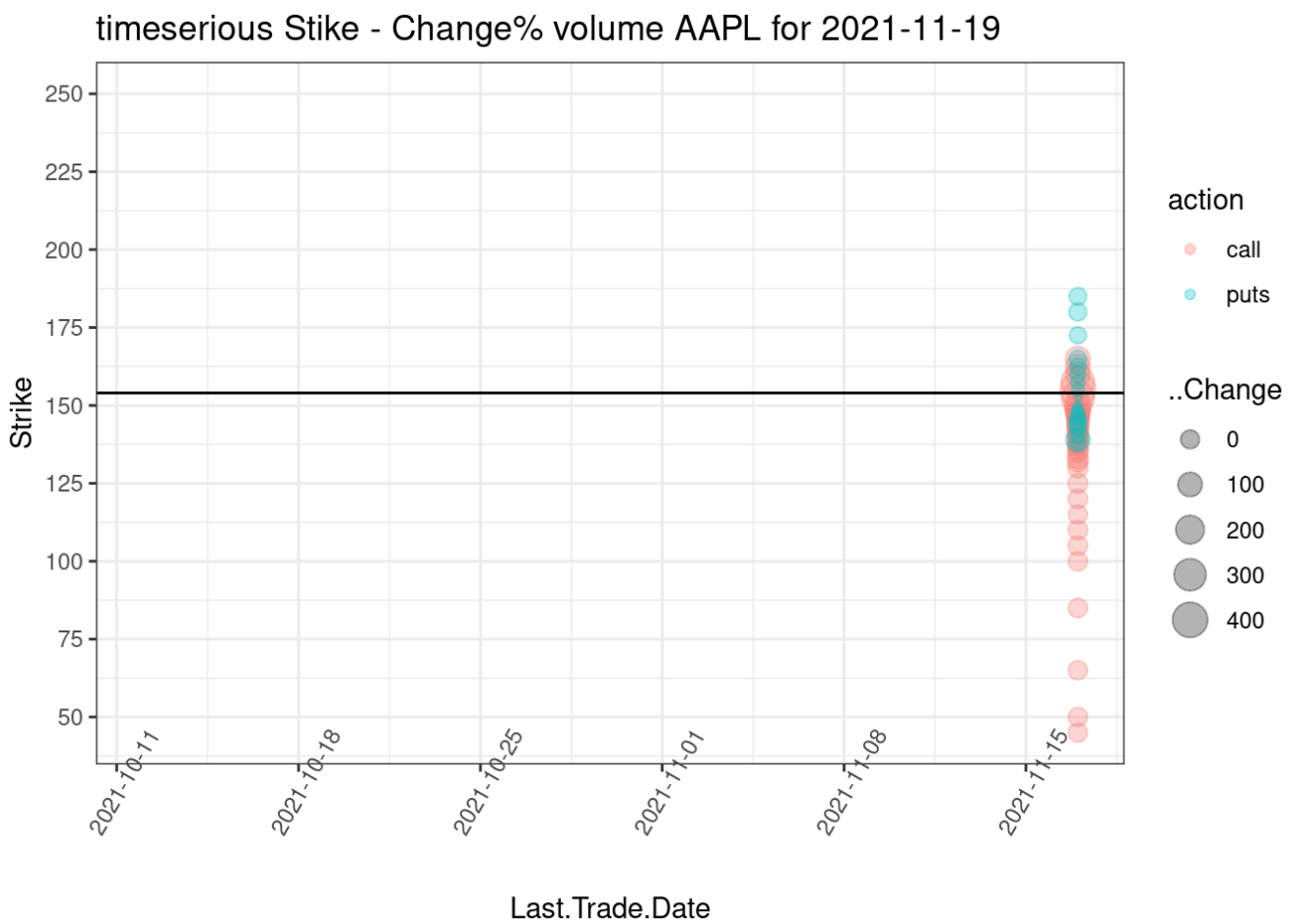


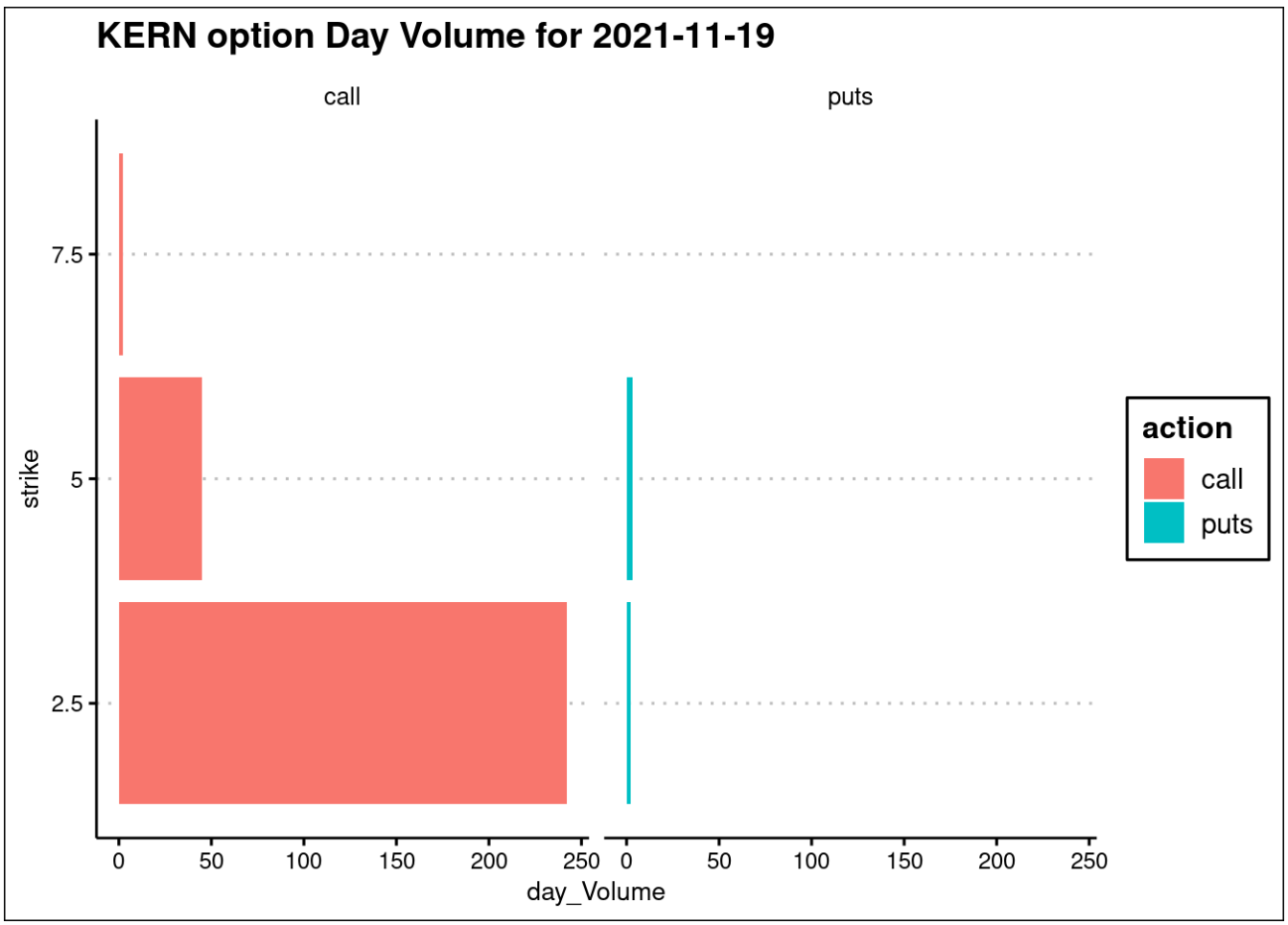
Options Analysis

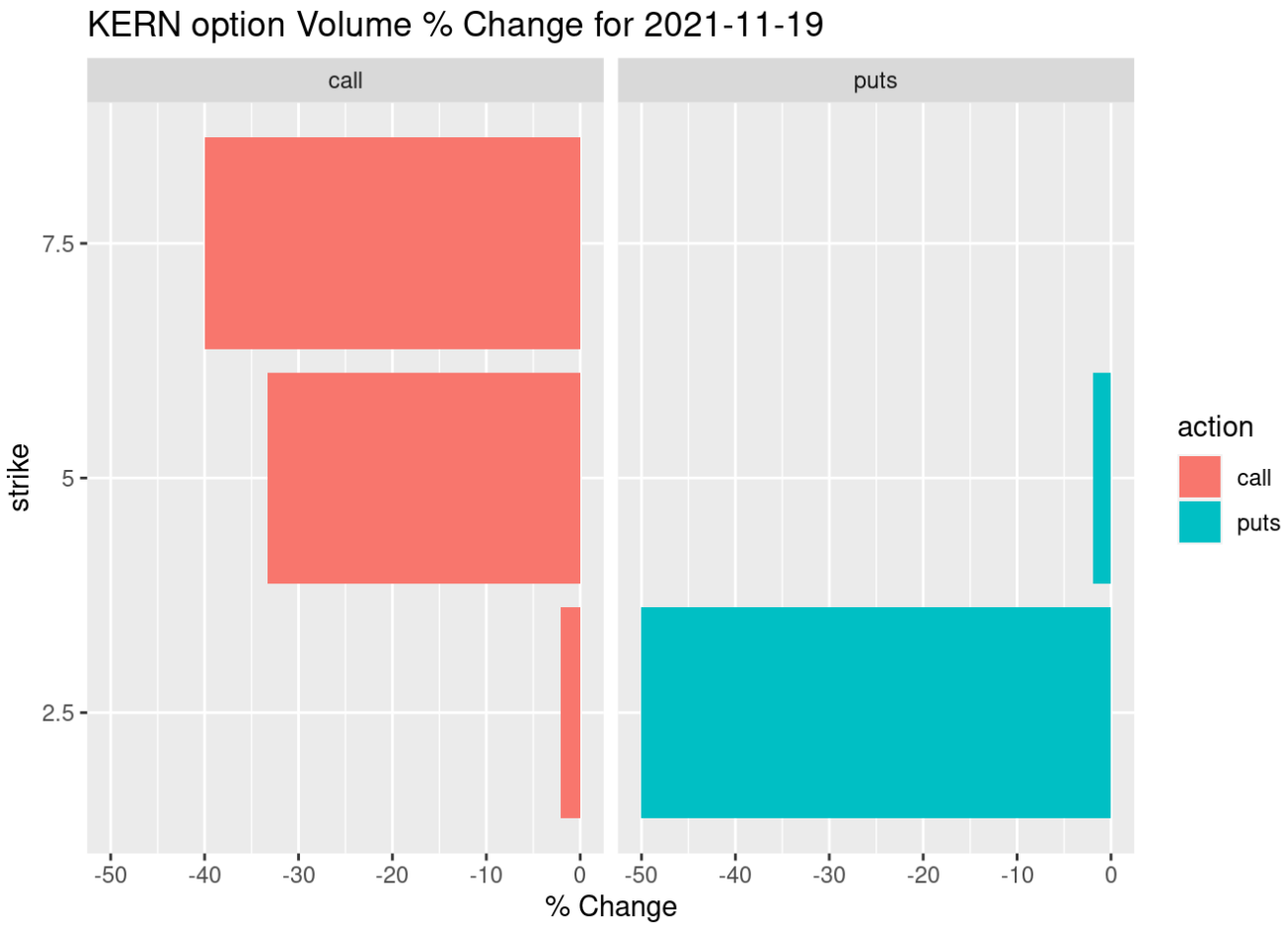


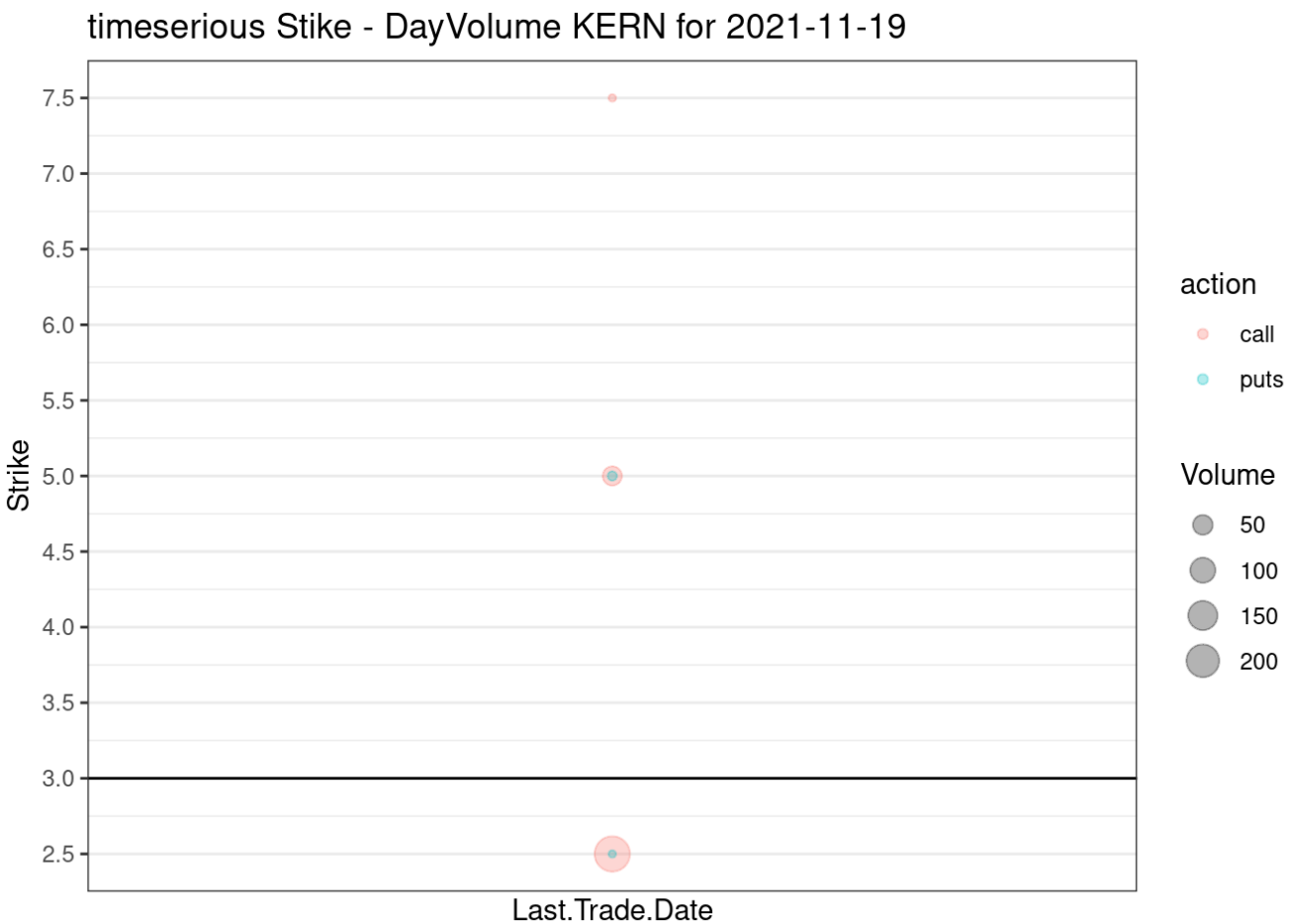

AAPL option Volume % Change for 2021-11-19
call
puts
strike
% Change
action
call
puts

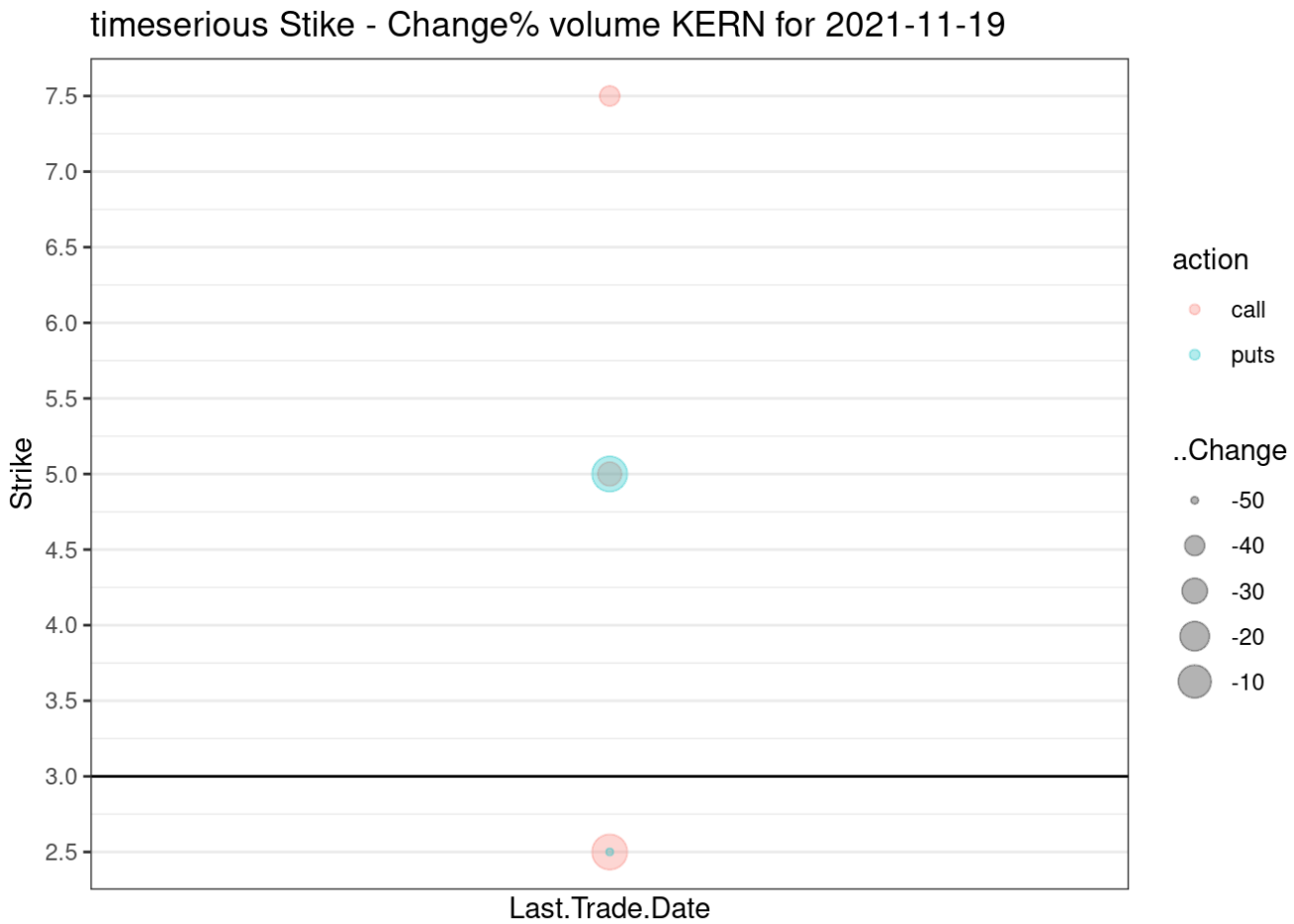

timeserious Stike - DayVolume AAPL for 2021-11-19
Strike
Last.Trade.Date
action
call
puts
Volume
200
400
600
800

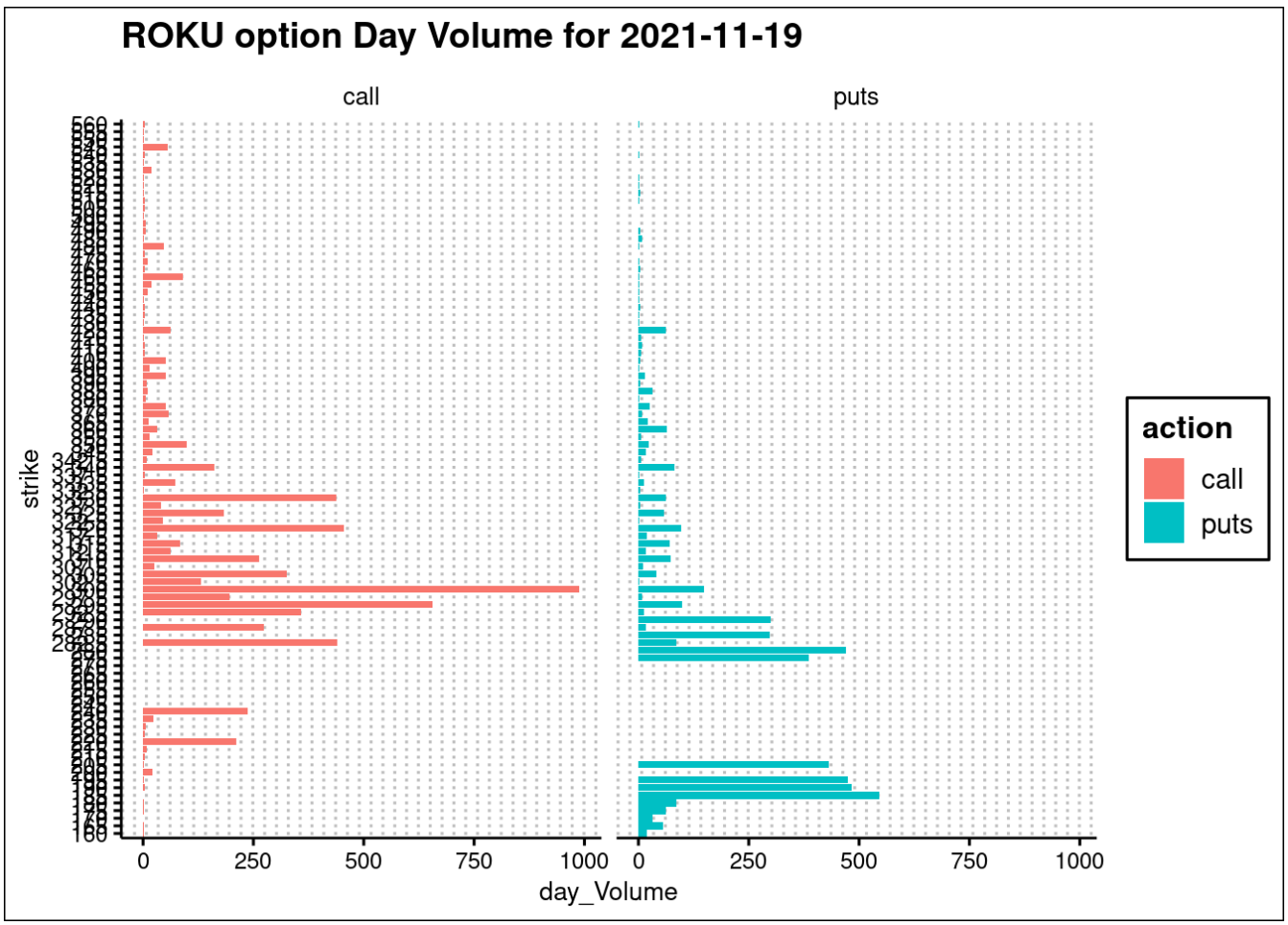

timeserious Stike - Change% volume AAPL for 2021-11-19
Strike
250
225
200
175
150
125
100
75
50
2021-10-11
2021-10-18
2021-10-25
2021-11-01
2021-11-08
2021-11-15
Last.Trade.Date
action
call
puts
..Change
0
100
200
300
400

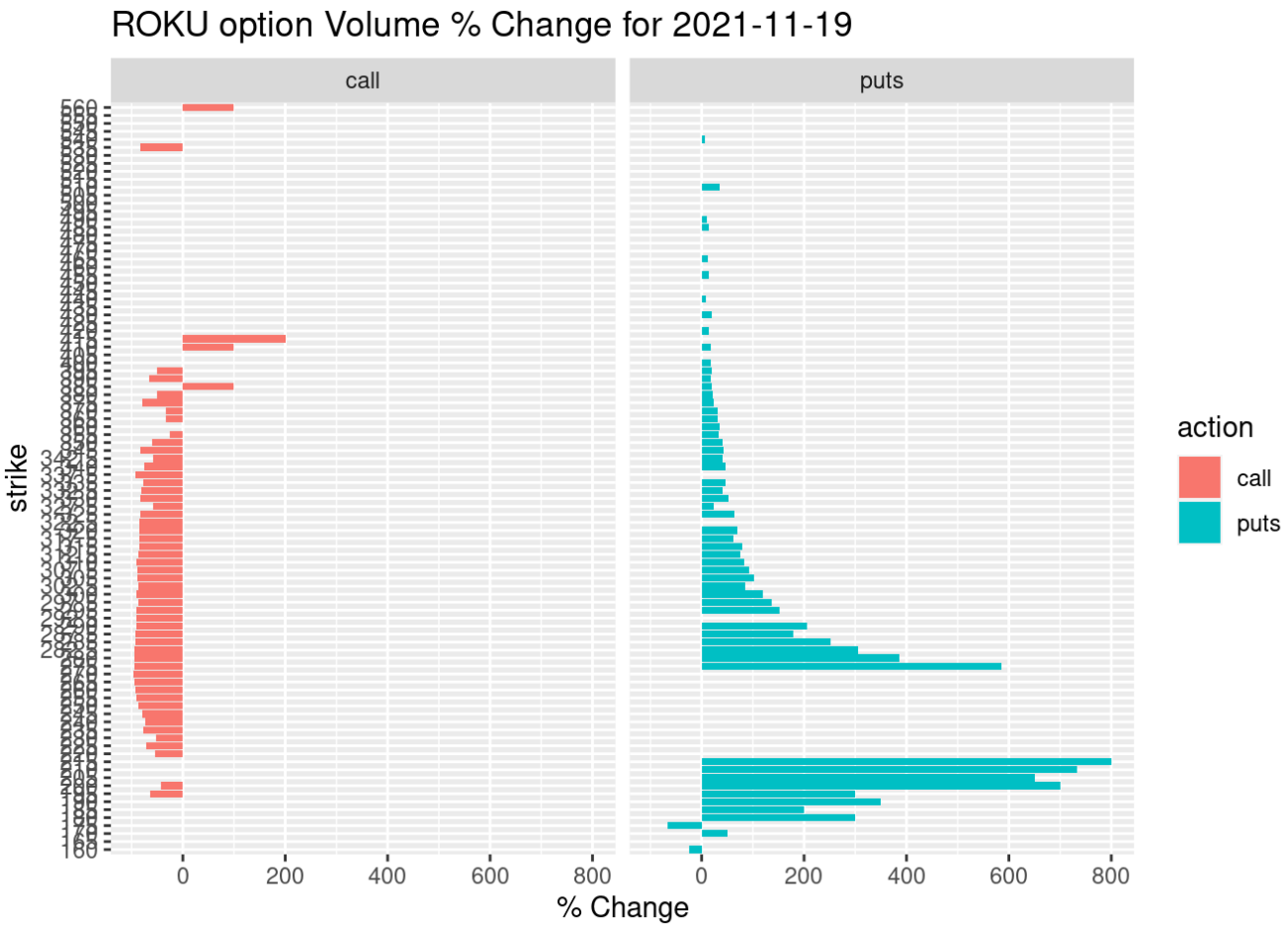

KERN option Day Volume for 2021-11-19
call
puts
strike
7.5
5
2.5
0
50
100
150
200
250
day_Volume
action
call
puts

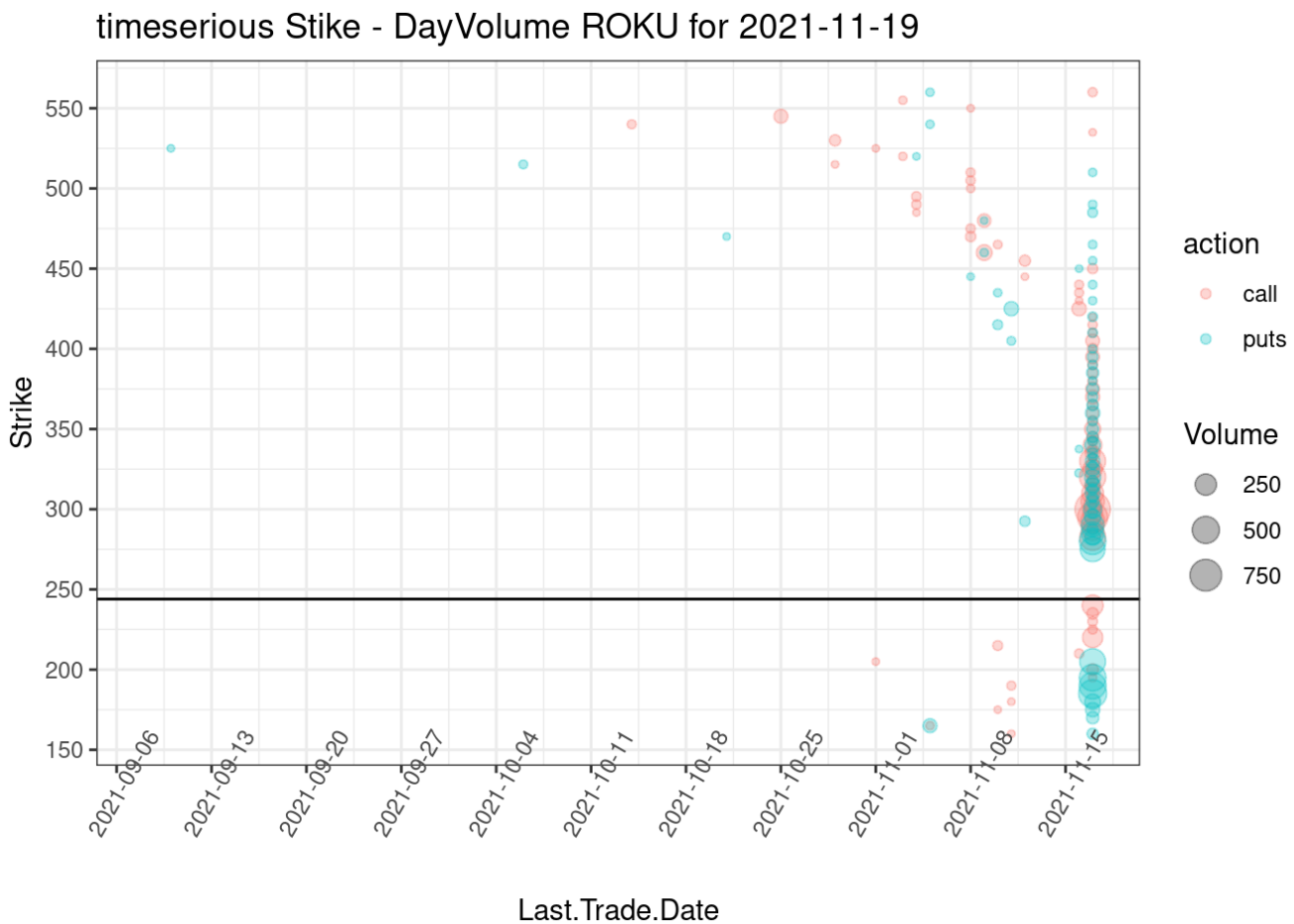

KERN option Volume % Change for 2021-11-19
call
puts
strike
7.5
5
2.5
-50
-40
-30
-20
-10
0
% Change
action
call
puts

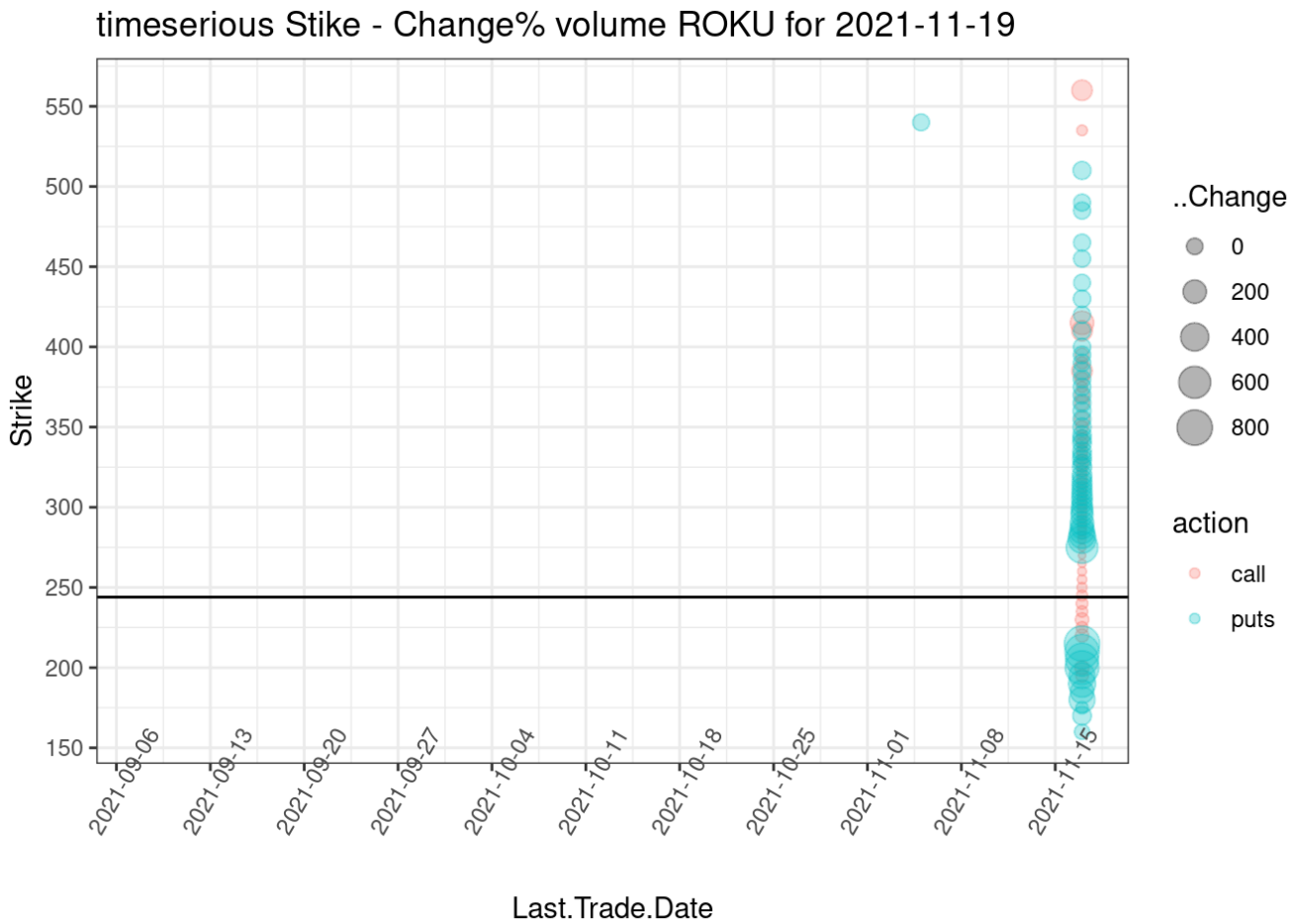

timeserious Stike - DayVolume KERN for 2021-11-19
Strike
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
Last.Trade.Date
action
call
puts
Volume
50
100
150
200

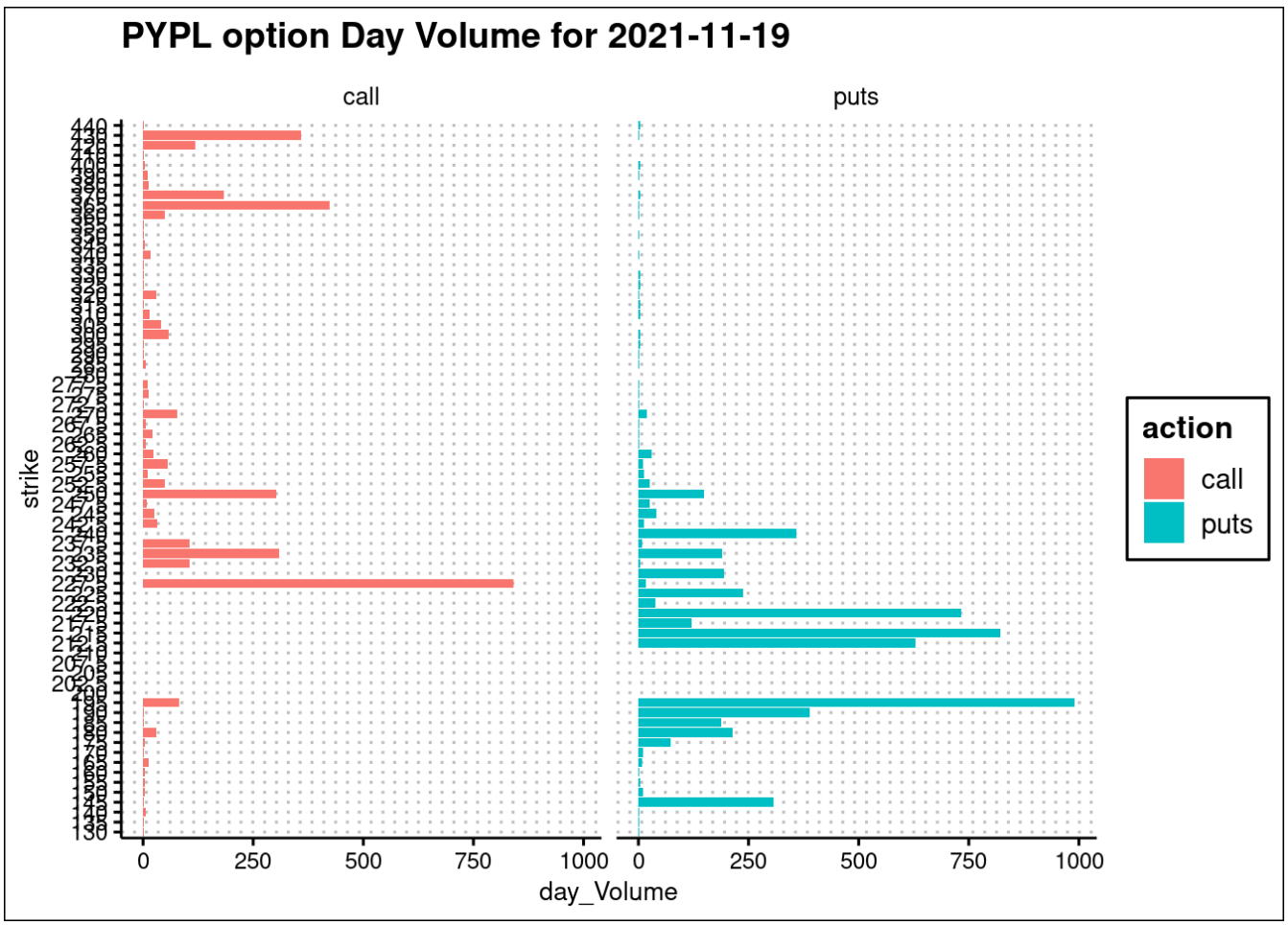

timeserious Stike - Change% volume KERN for 2021-11-19
Strike
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
Last.Trade.Date
action
call
puts
..Change
-50
-40
-30
-20
-10

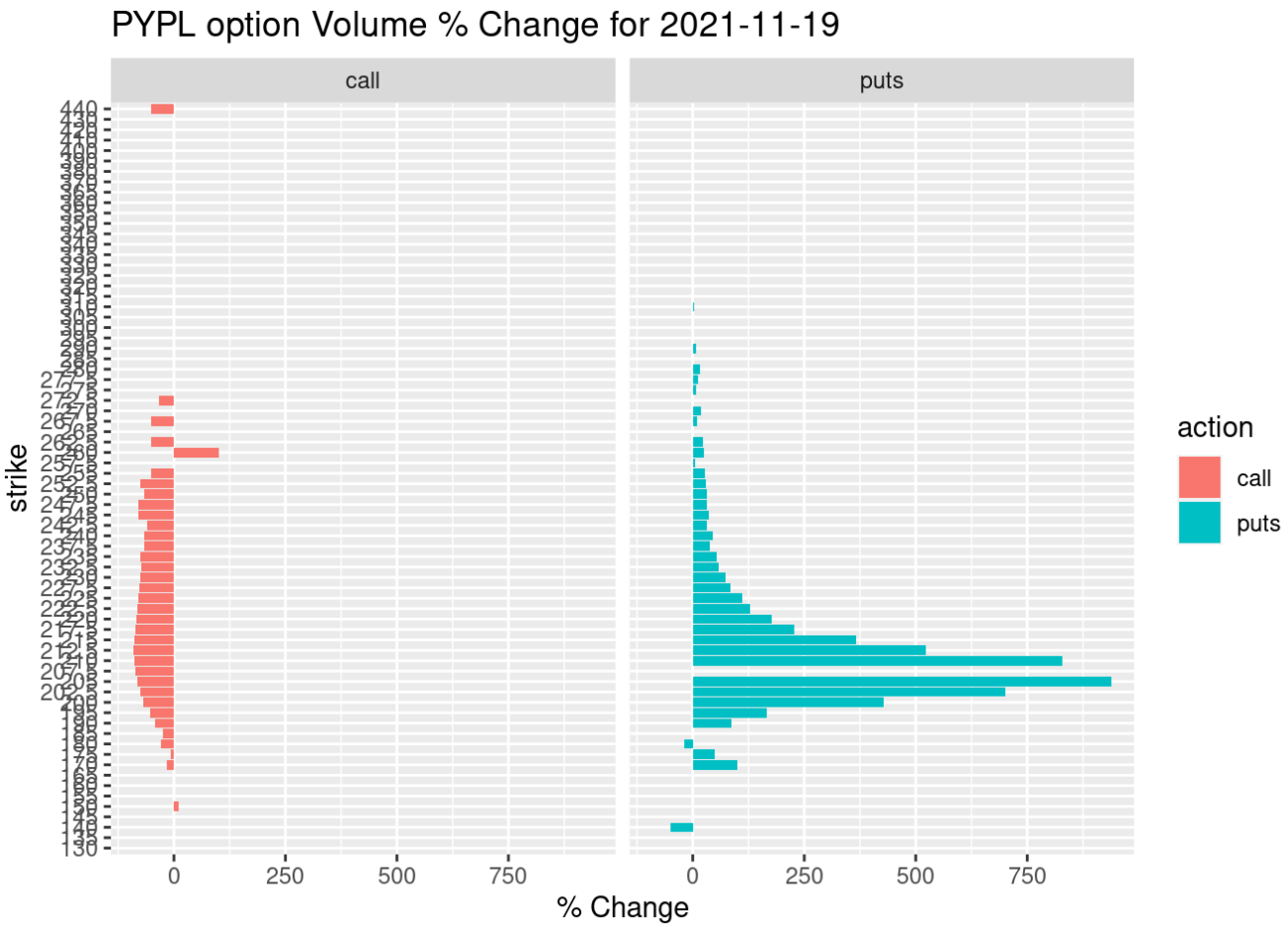

ROKU option Day Volume for 2021-11-19
call
puts
strike
0
250
500
750
1000
day_Volume
action
call
puts

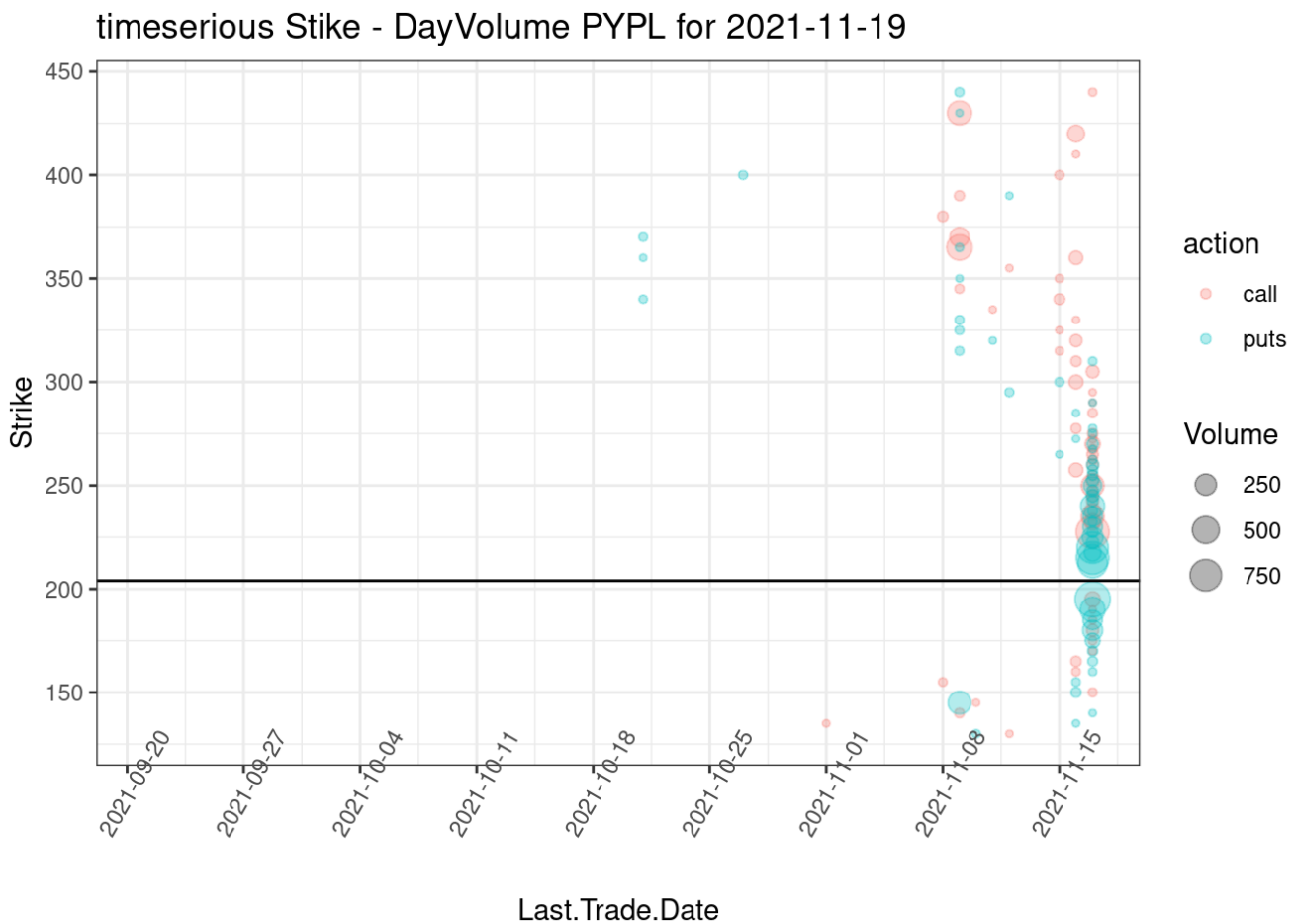

ROKU option Volume % Change for 2021-11-19
call
puts
strike
% Change
0
200
400
600
800
action
call
puts

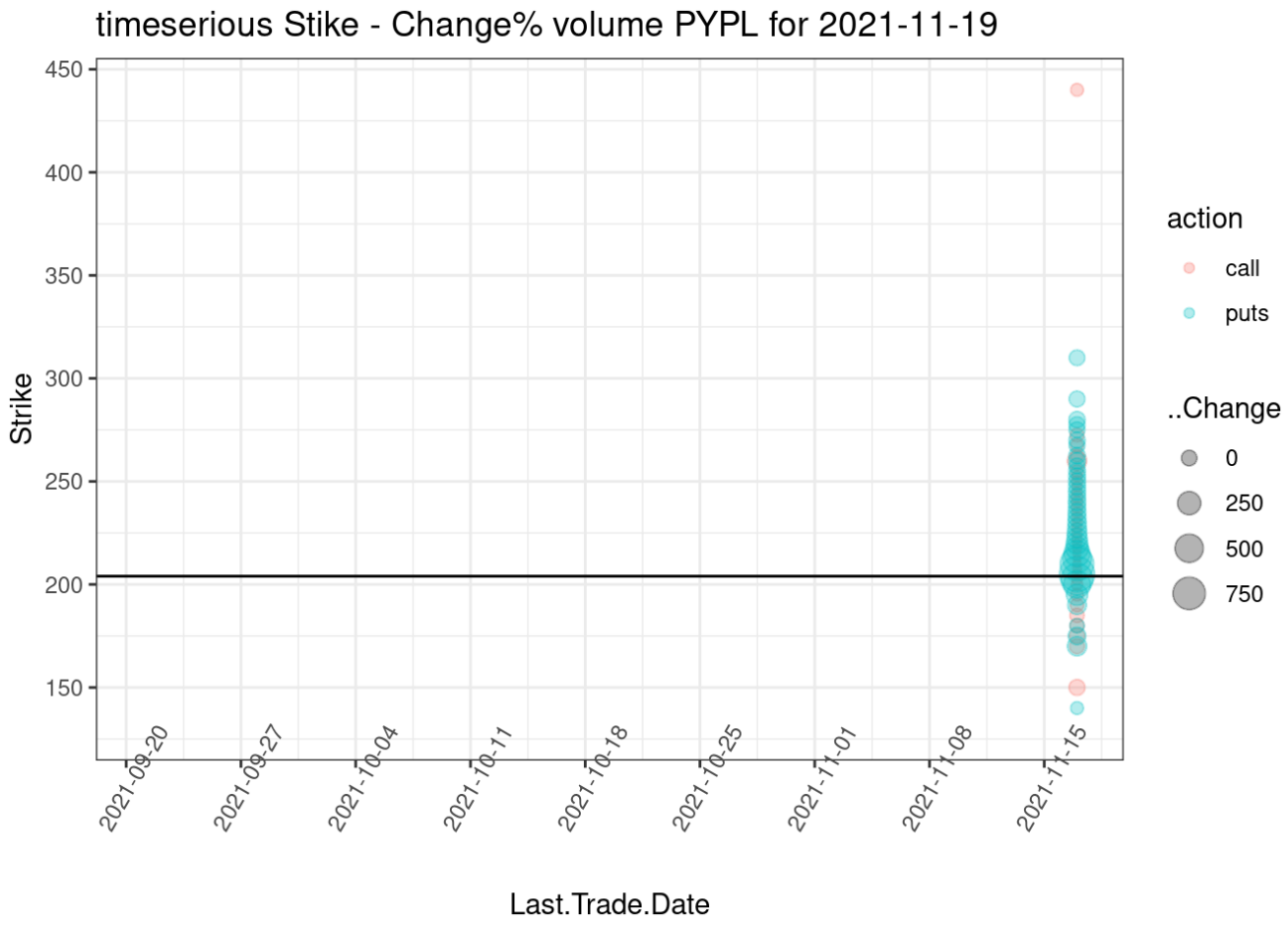

timeserious Stike - DayVolume ROKU for 2021-11-19
Strike
550
500
450
400
350
300
250
200
150
2021-09-06
2021-09-13
2021-09-20
2021-09-27
2021-10-04
2021-10-11
2021-10-18
2021-10-25
2021-11-01
2021-11-08
2021-11-15
Last.Trade.Date
action
call
puts
Volume
250
500
750


timeserious Stike - Change% volume ROKU for 2021-11-19
Strike
550
500
450
400
350
300
250
200
150
2021-09-06
2021-09-13
2021-09-20
2021-09-27
2021-10-04
2021-10-11
2021-10-18
2021-10-25
2021-11-01
2021-11-08
2021-11-15
Last.Trade.Date
..Change
0
200
400
600
800
action
call
puts

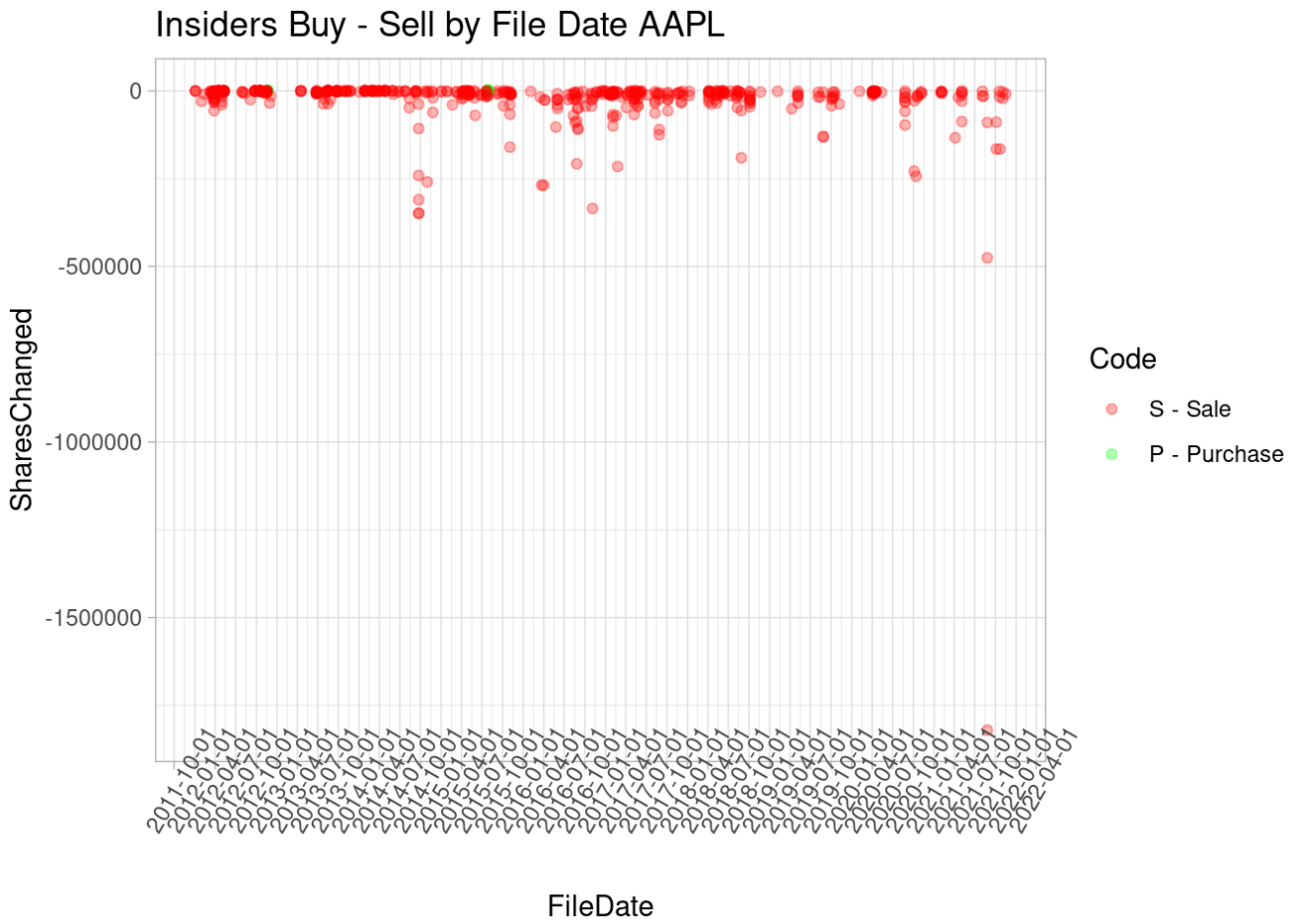

PYPL option Day Volume for 2021-11-19
call
puts
strike
0
250
500
750
1000
day_Volume
action
call
puts

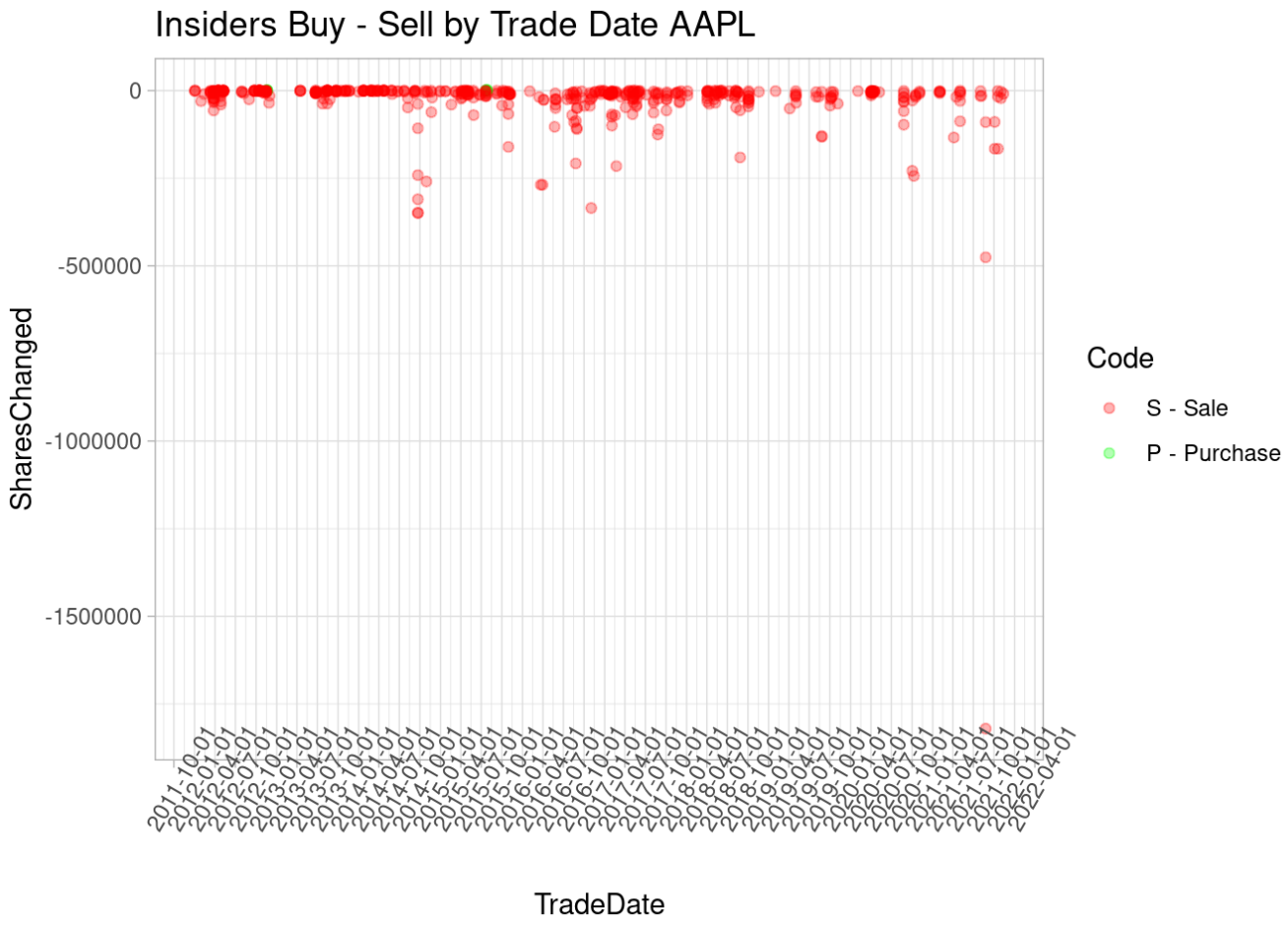

PYPL option Volume % Change for 2021-11-19
call
puts
strike
% Change
0
250
500
750
action
call
puts

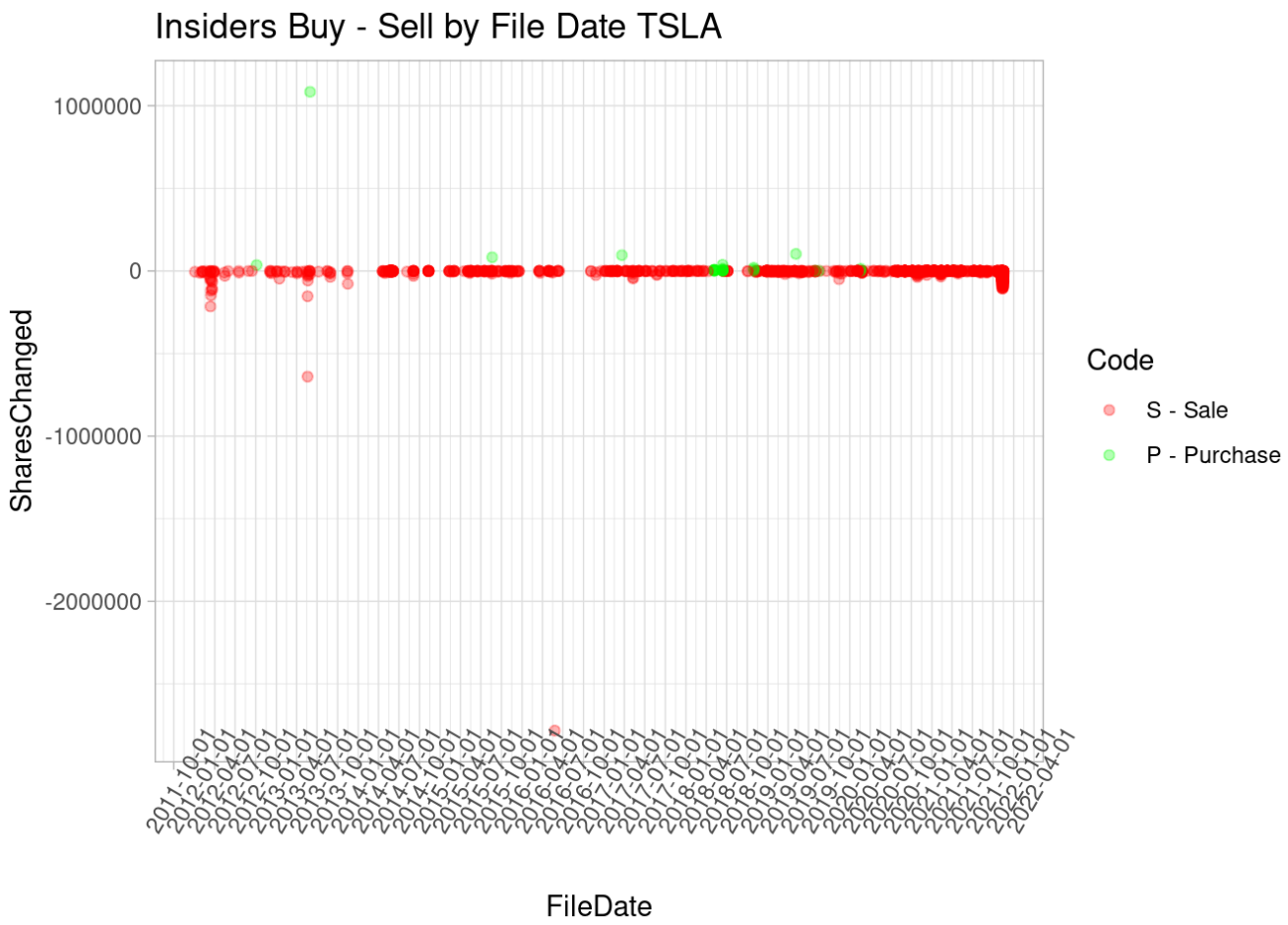

timeserious Stike - DayVolume PYPL for 2021-11-19
Strike
450
400
350
300
250
200
150
2021-09-20
2021-09-27
2021-10-04
2021-10-11
2021-10-18
2021-10-25
2021-11-01
2021-11-08
2021-11-15
Last.Trade.Date
action
call
puts
Volume
250
500
750

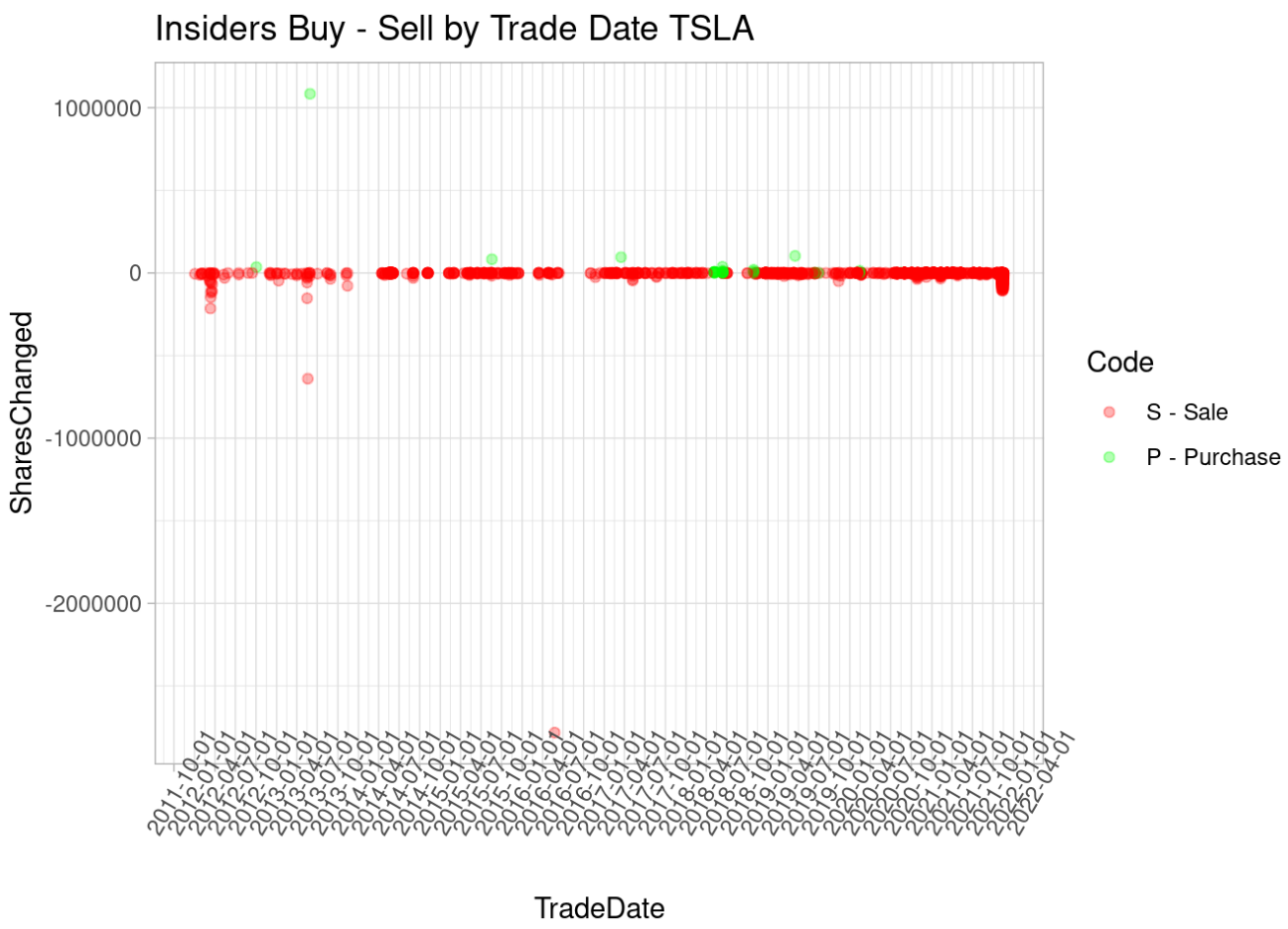


INSIDERS BUY-SELL




Insiders Buy - Sell by Trade Date AAPL
SharesChanged
0
-500000
-1000000
-1500000
TradeDate
Code
S - Sale
P - Purchase


Insiders Buy - Sell by File Date TSLA
SharesChanged
1000000
0
-1000000
-2000000
FileDate
Code
S - Sale
P - Purchase


Insiders Buy - Sell by Trade Date TSLA
1000000
0
-1000000
-2000000
SharesChanged
2011-10-01
2012-01-01
2012-04-01
2012-07-01
2012-10-01
2013-01-01
2013-04-01
2013-07-01
2013-10-01
2014-01-01
2014-04-01
2014-07-01
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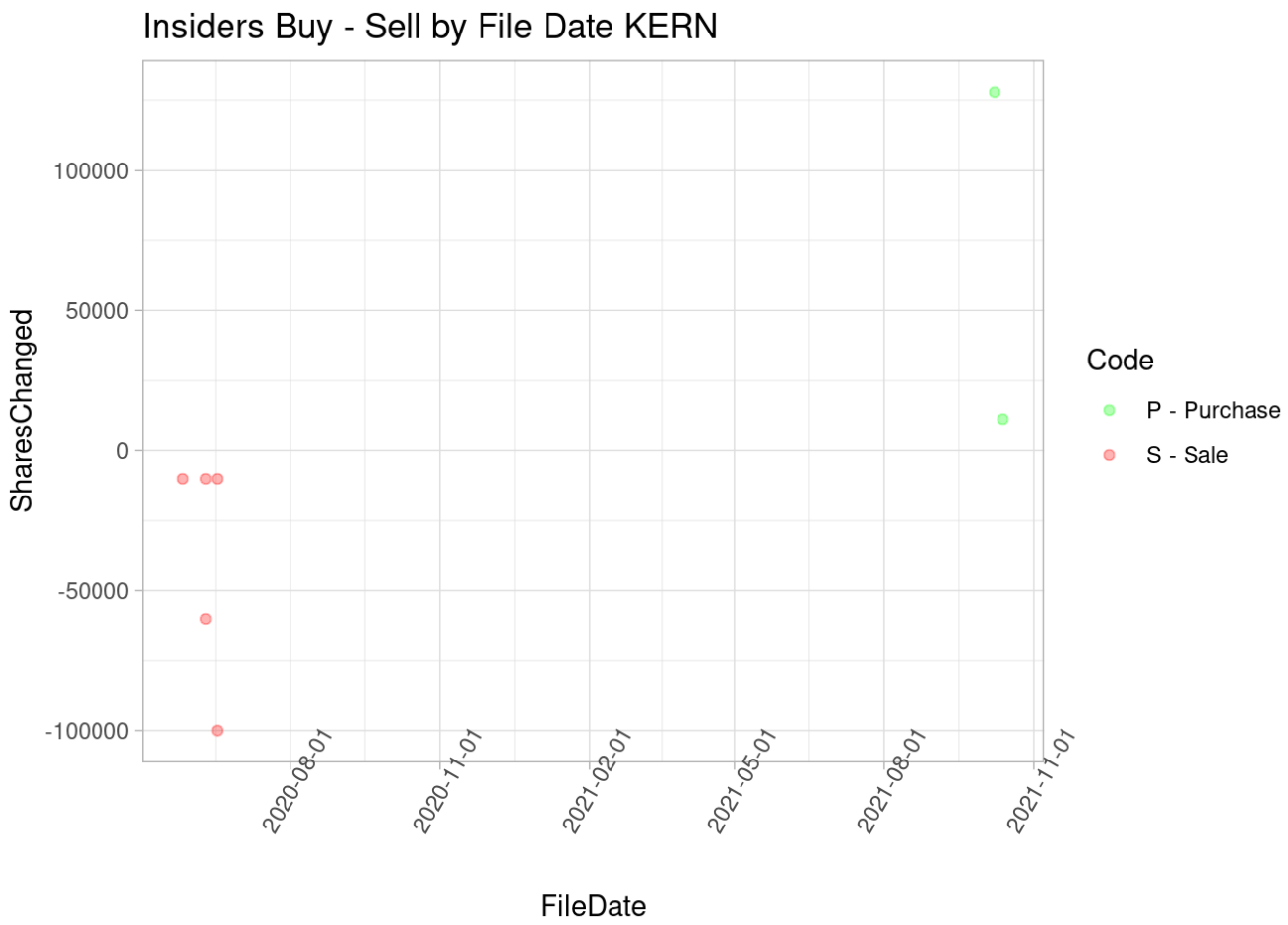
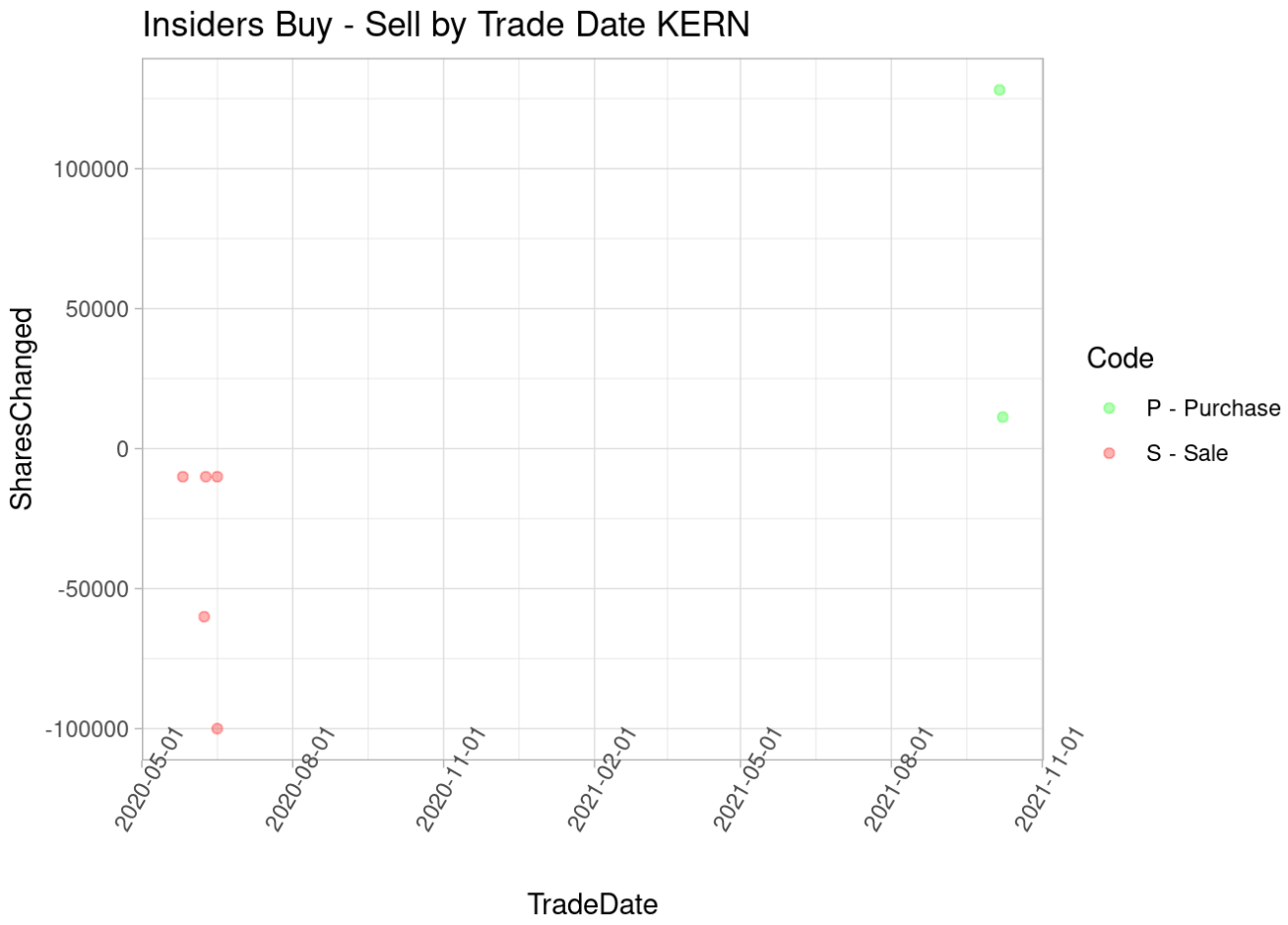
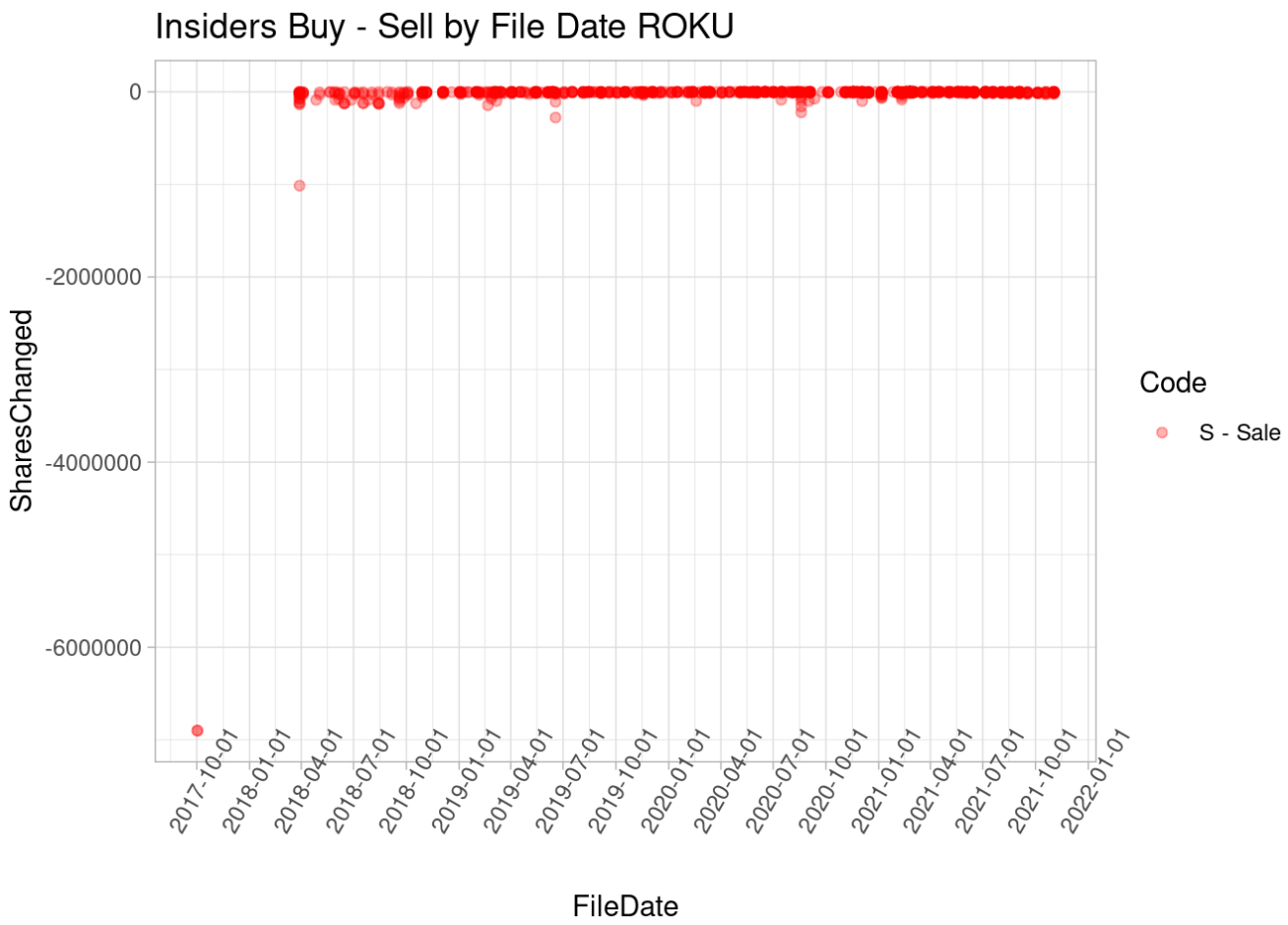
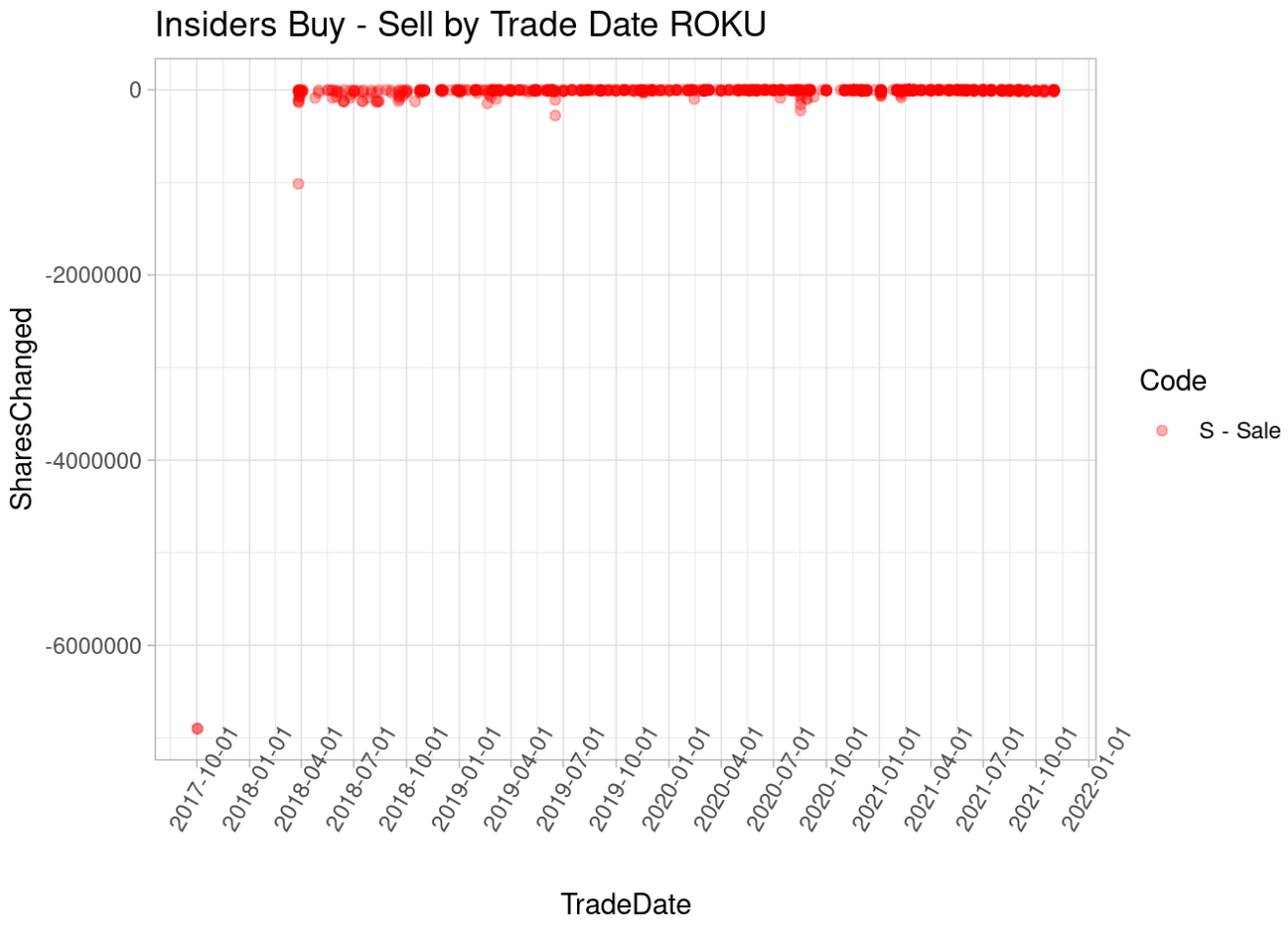
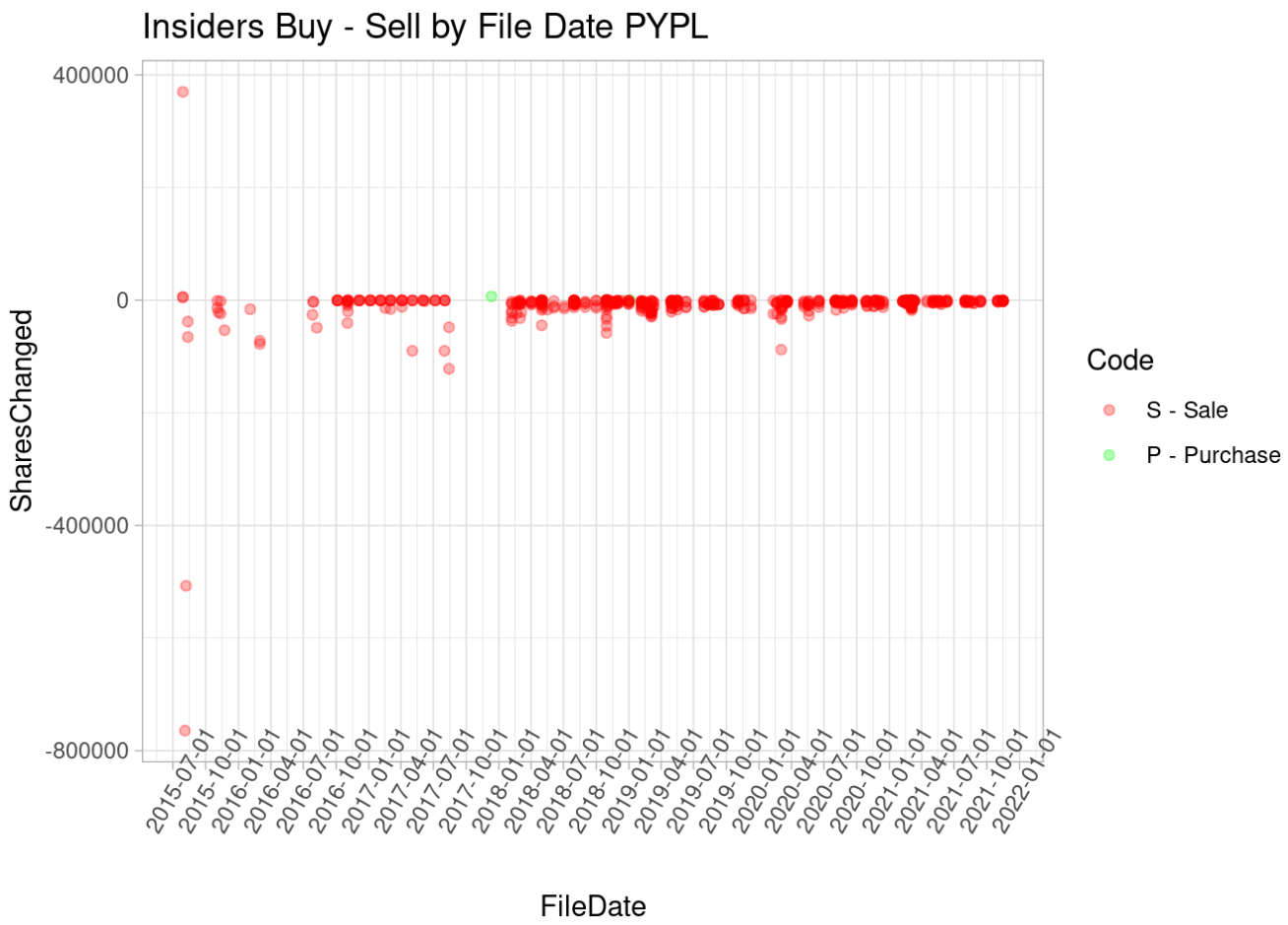
2020-07-01
2020-10-01
2021-01-01
2021-04-01
2021-07-01
2021-10-01
2022-01-01
2022-04-01
TradeDate
Code
S - Sale
P - Purchase


Insiders Buy - Sell by File Date KERN
100000
50000
0
-50000
-100000
SharesChanged
2020-08-01
2020-11-01
2021-02-01
2021-05-01
2021-08-01
2021-11-01
FileDate
Code
P - Purchase
S - Sale


Insiders Buy - Sell by Trade Date KERN
SharesChanged
100000
50000
0
-50000
-100000
2020-05-01
2020-08-01
2020-11-01
2021-02-01
2021-05-01
2021-08-01
2021-11-01
TradeDate
Code
P - Purchase
S - Sale


Insiders Buy - Sell by File Date ROKU
SharesChanged
0
-2000000
-4000000
-6000000
2017-10-01
2018-01-01
2018-04-01
2018-07-01
2018-10-01
2019-01-01
2019-04-01
2019-07-01
2019-10-01
2020-01-01
2020-04-01
2020-07-01
2020-10-01
2021-01-01
2021-04-01
2021-07-01
2021-10-01
2022-01-01
FileDate
Code
S - Sale


Insiders Buy - Sell by Trade Date ROKU
SharesChanged
0
-2000000
-4000000
-6000000
2017-10-01
2018-01-01
2018-04-01
2018-07-01
2018-10-01
2019-01-01
2019-04-01
2019-07-01
2019-10-01
2020-01-01
2020-04-01
2020-07-01
2020-10-01
2021-01-01
2021-04-01
2021-07-01
2021-10-01
2022-01-01
TradeDate
Code
S - Sale


Insiders Buy - Sell by File Date PYPL
SharesChanged
400000
0
-400000
-800000
2015-07-01
2015-10-01
2016-01-01
2016-04-01
2016-07-01
2016-10-01
2017-01-01
2017-04-01
2017-07-01
2017-10-01
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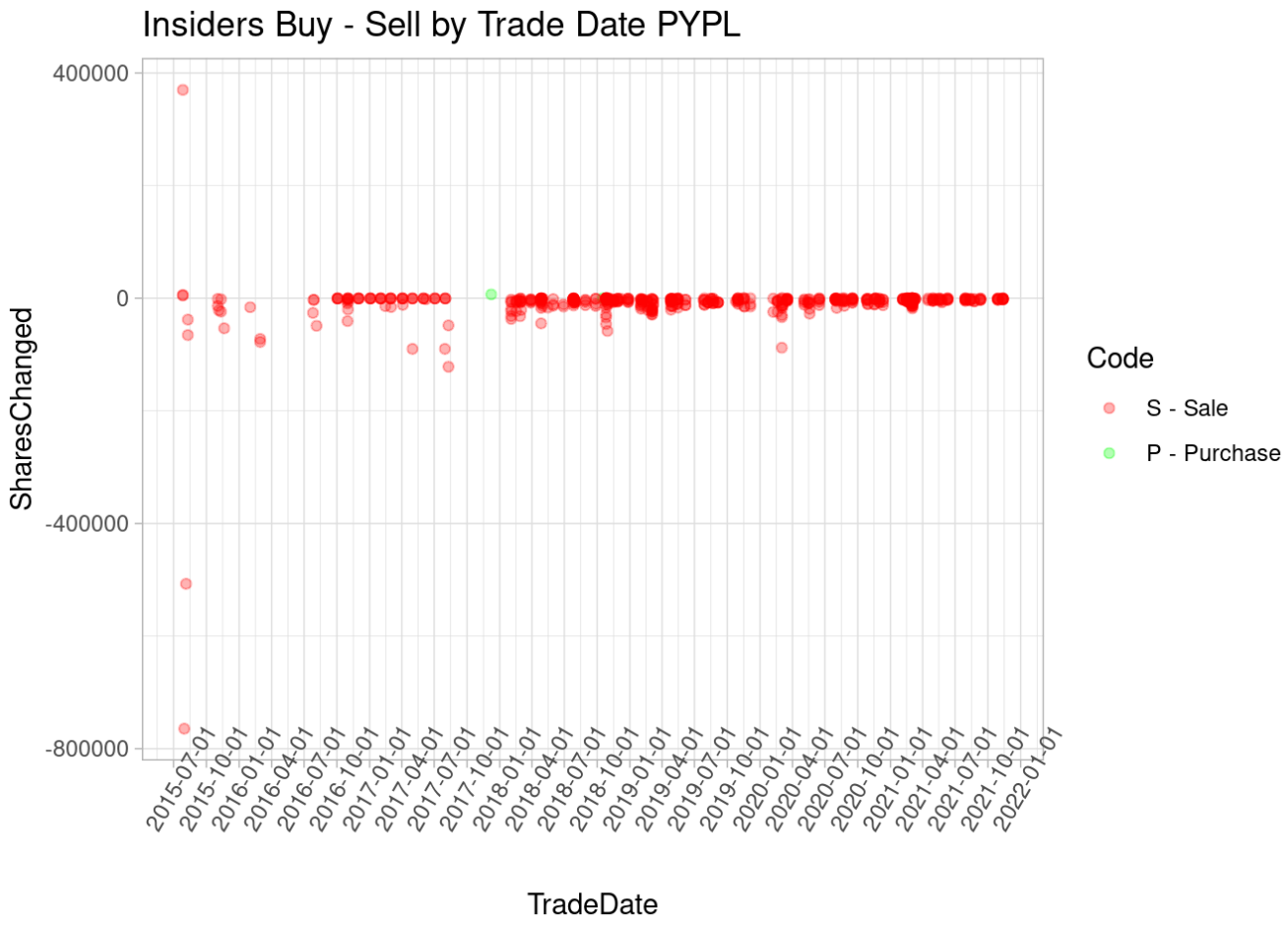
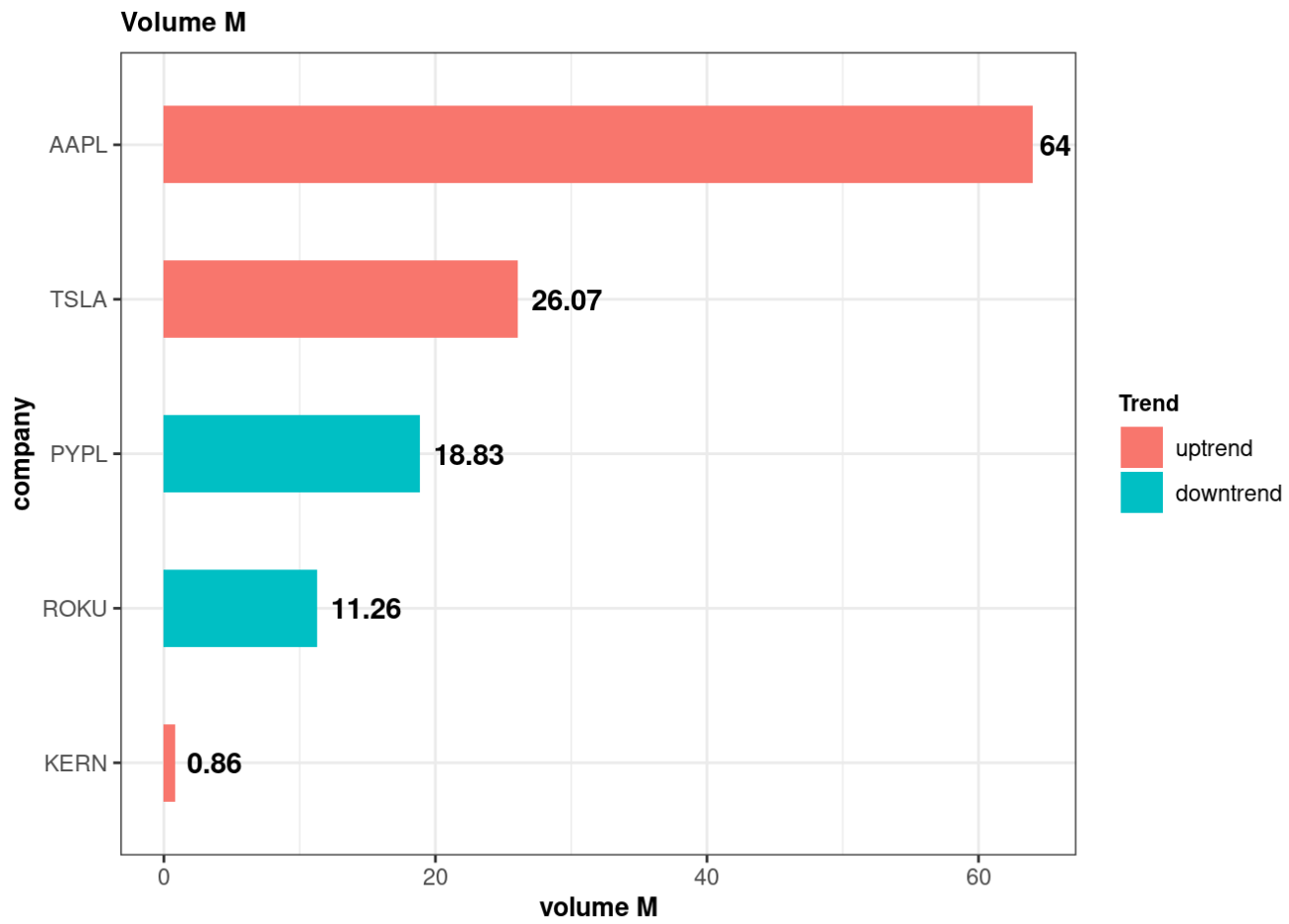
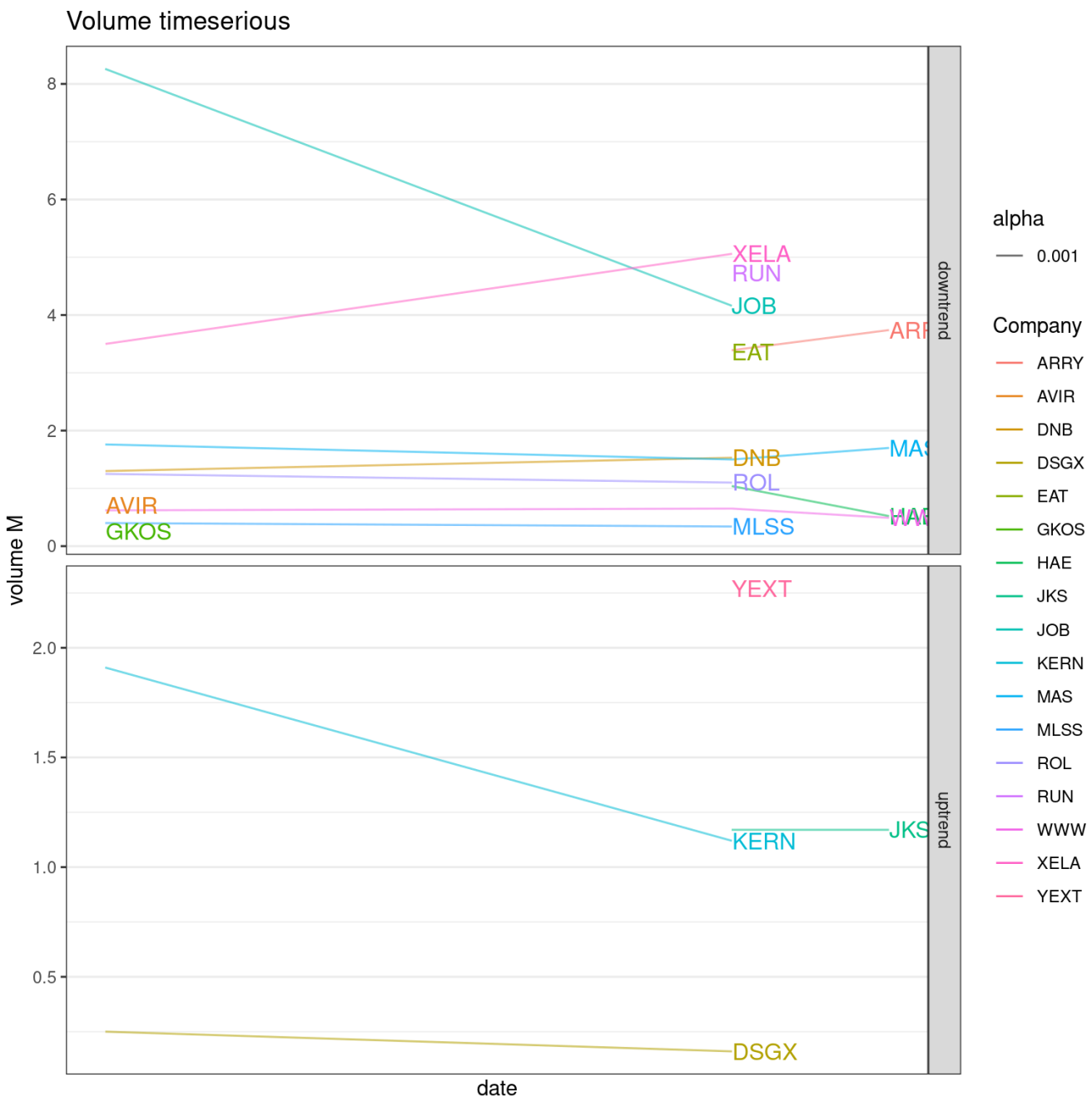
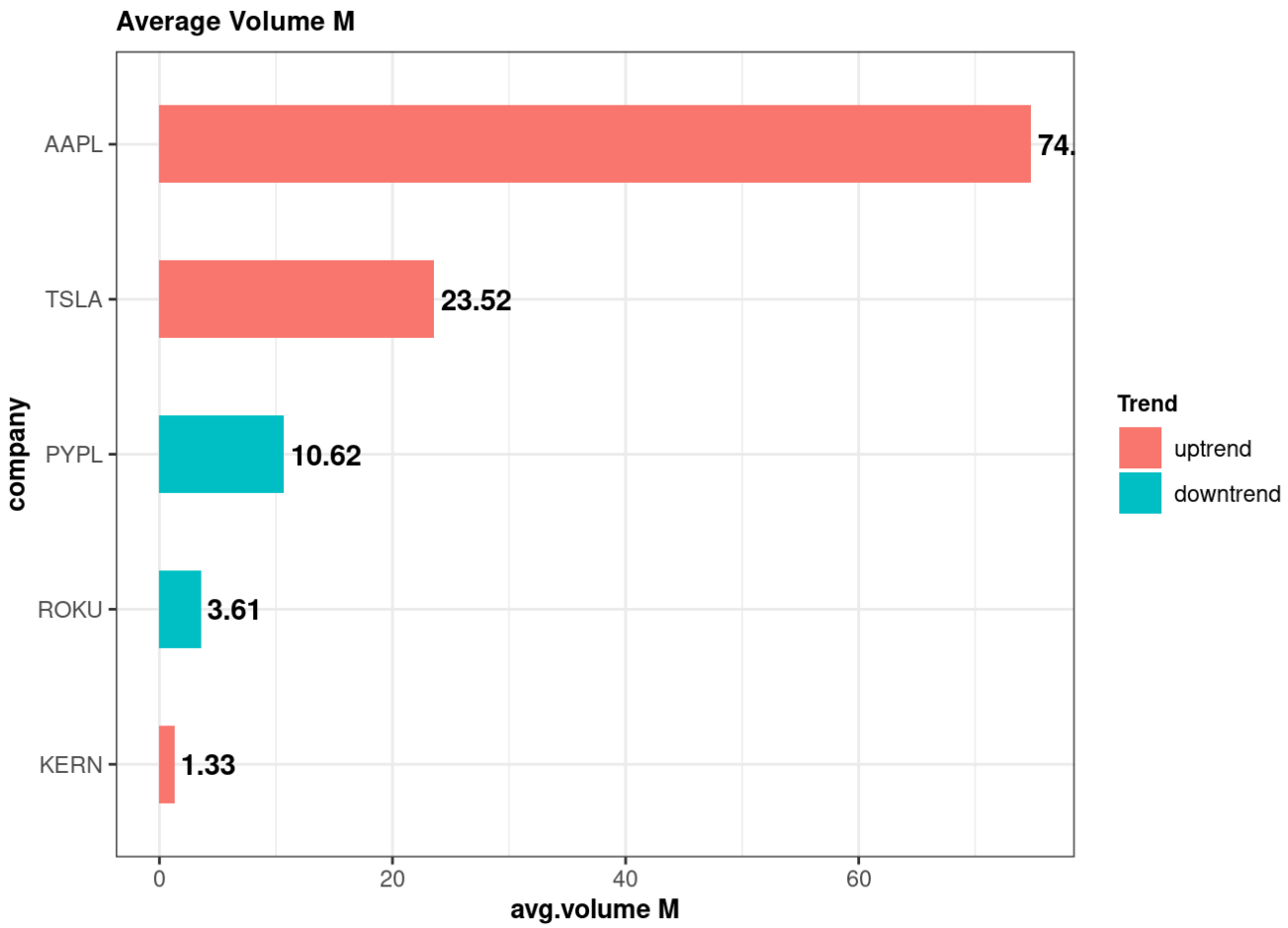
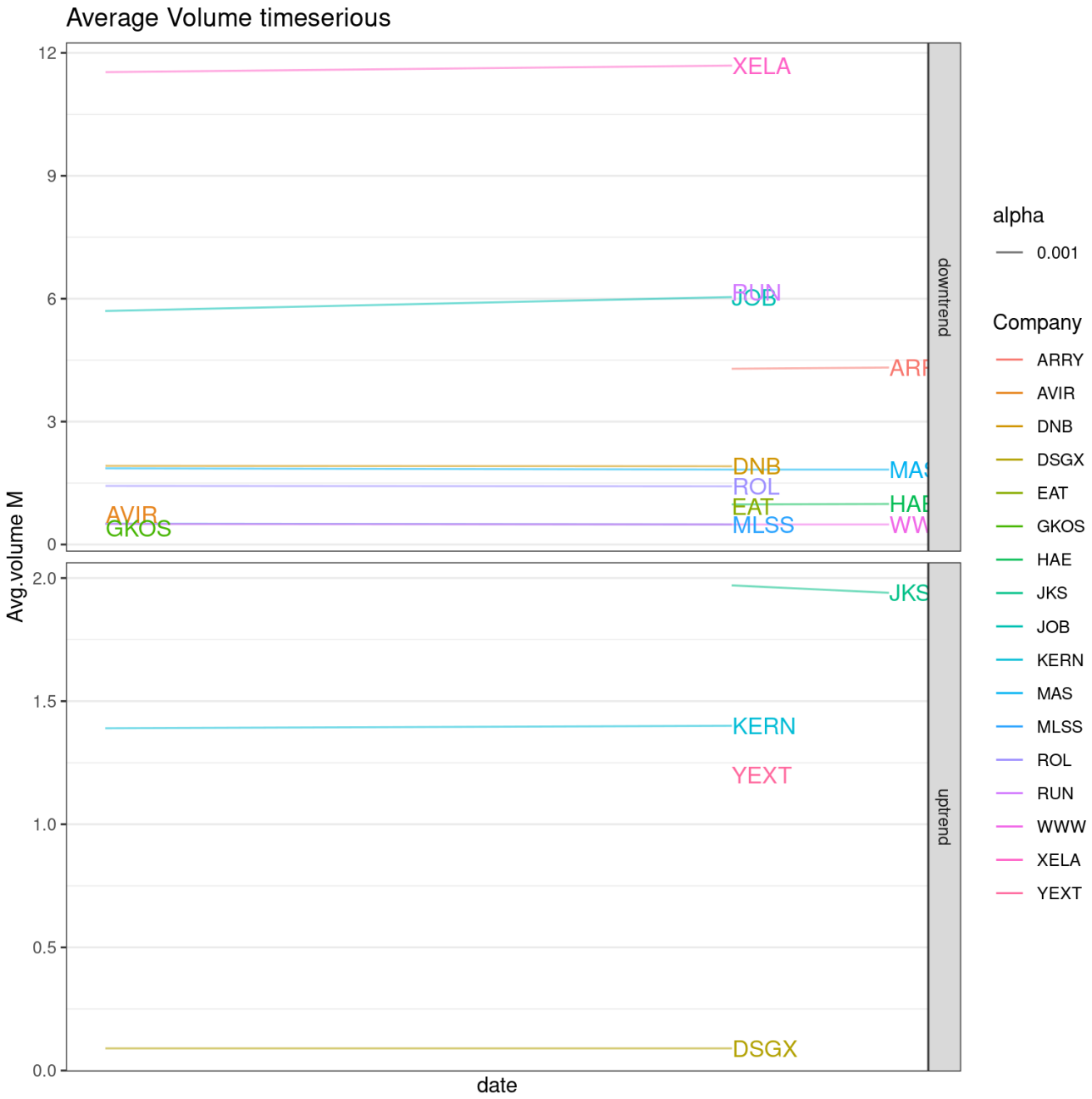
2020-07-01
2020-10-01
2021-01-01
2021-04-01
2021-07-01
2021-10-01
2022-01-01
FileDate
Code
S - Sale
P - Purchase

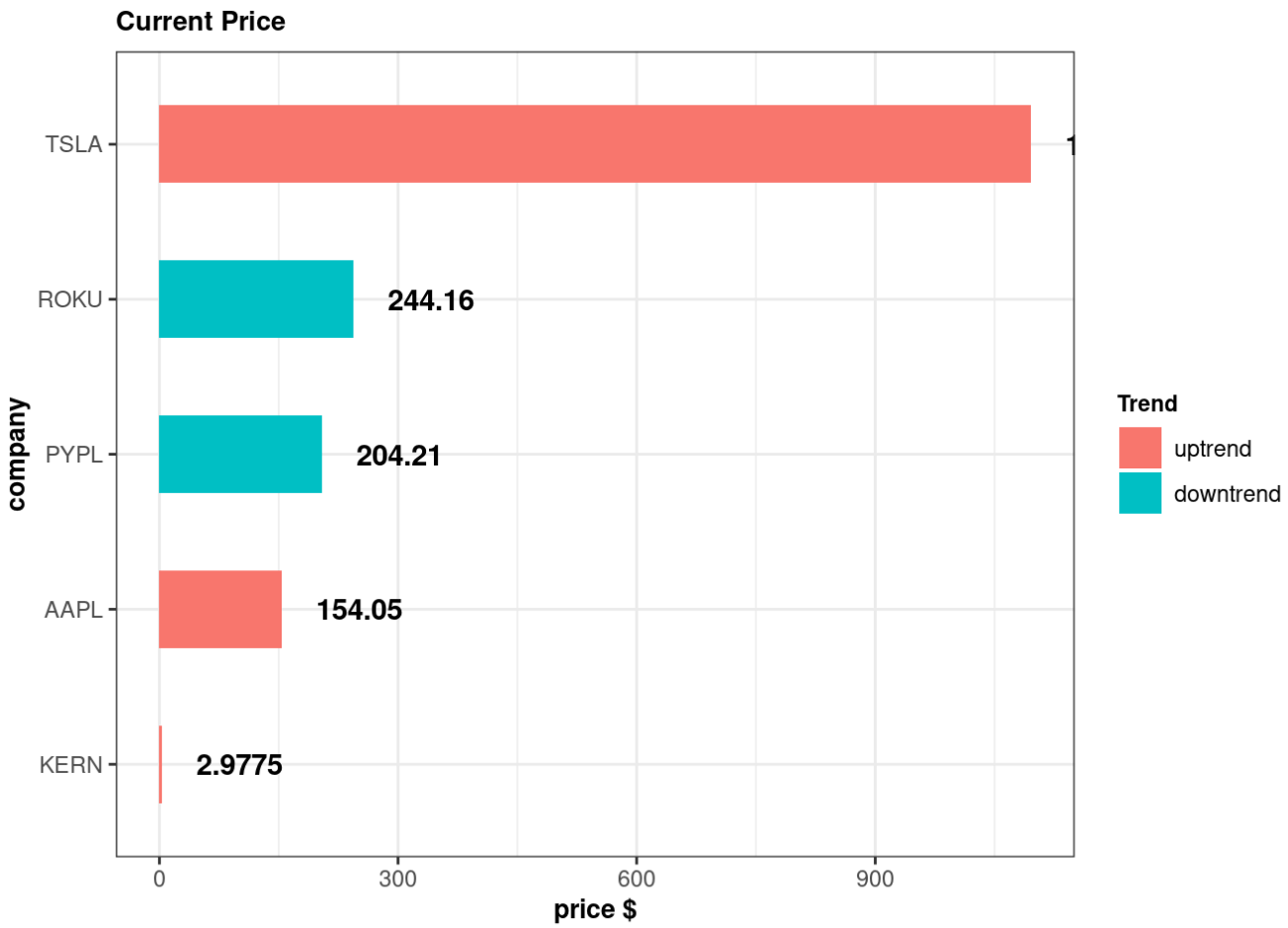

Insiders Buy - Sell by Trade Date PYPL
400000
0
-400000
-800000
SharesChanged
2015-07-01
2015-10-01
2016-01-01
2016-04-01
2016-07-01
2016-10-01
2017-01-01
2017-04-01
2017-07-01
2017-10-01
2018-01-01
2018-04-01
2018-07-01
2018-10-01
2019-01-01
2019-04-01
2019-07-01
2019-10-01
2020-01-01
2020-04-01
2020-07-01
2020-10-01
2021-01-01
2021-04-01
2021-07-01
2021-10-01
2022-01-01
TradeDate
Code
S - Sale
P - Purchase

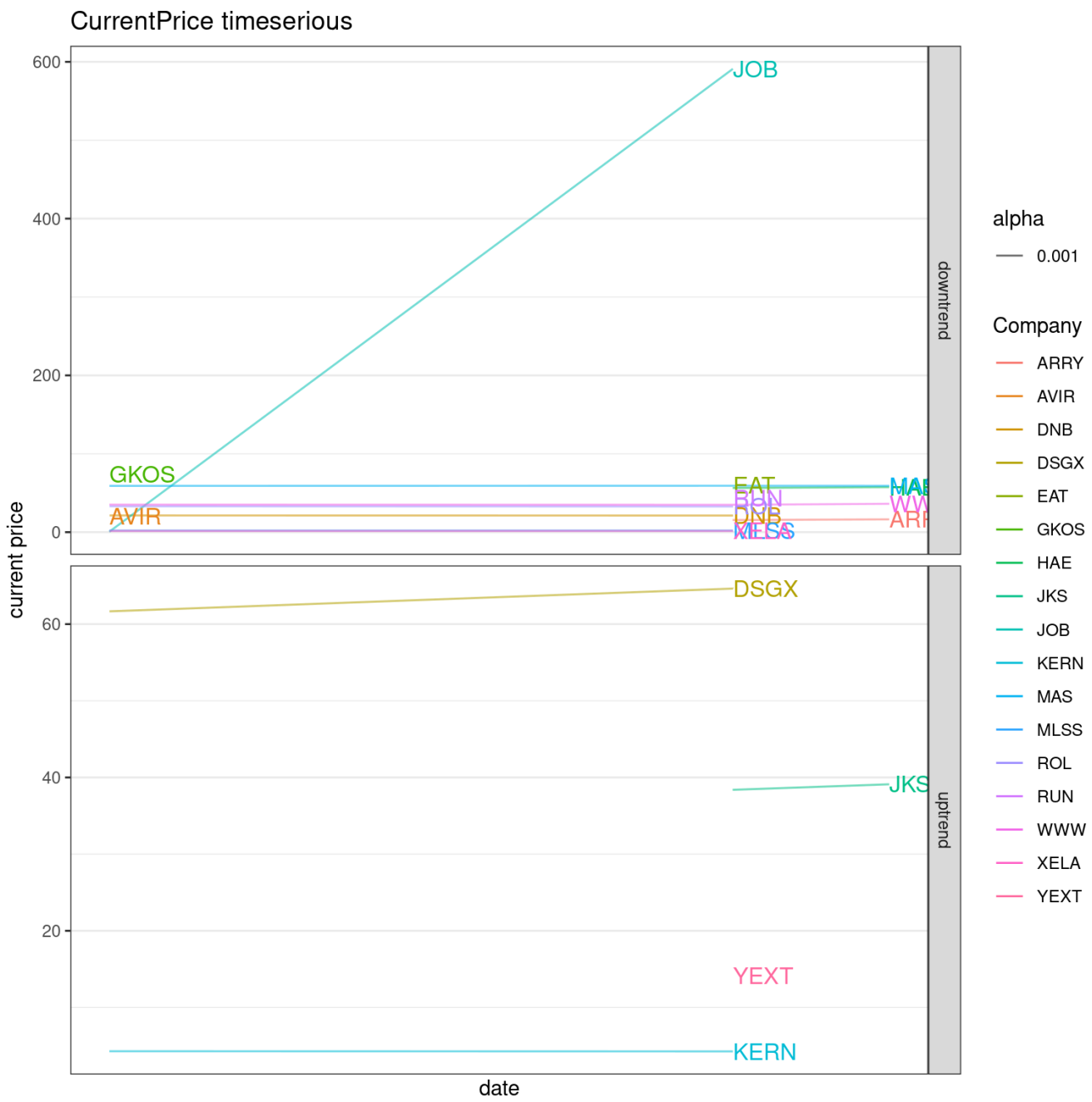

Volume M
AAPL
TSLA
PYPL
ROKU
KERN
company
64
26.07
18.83
11.26
0.86
0
20
40
60
volume M
Trend
uptrend
downtrend

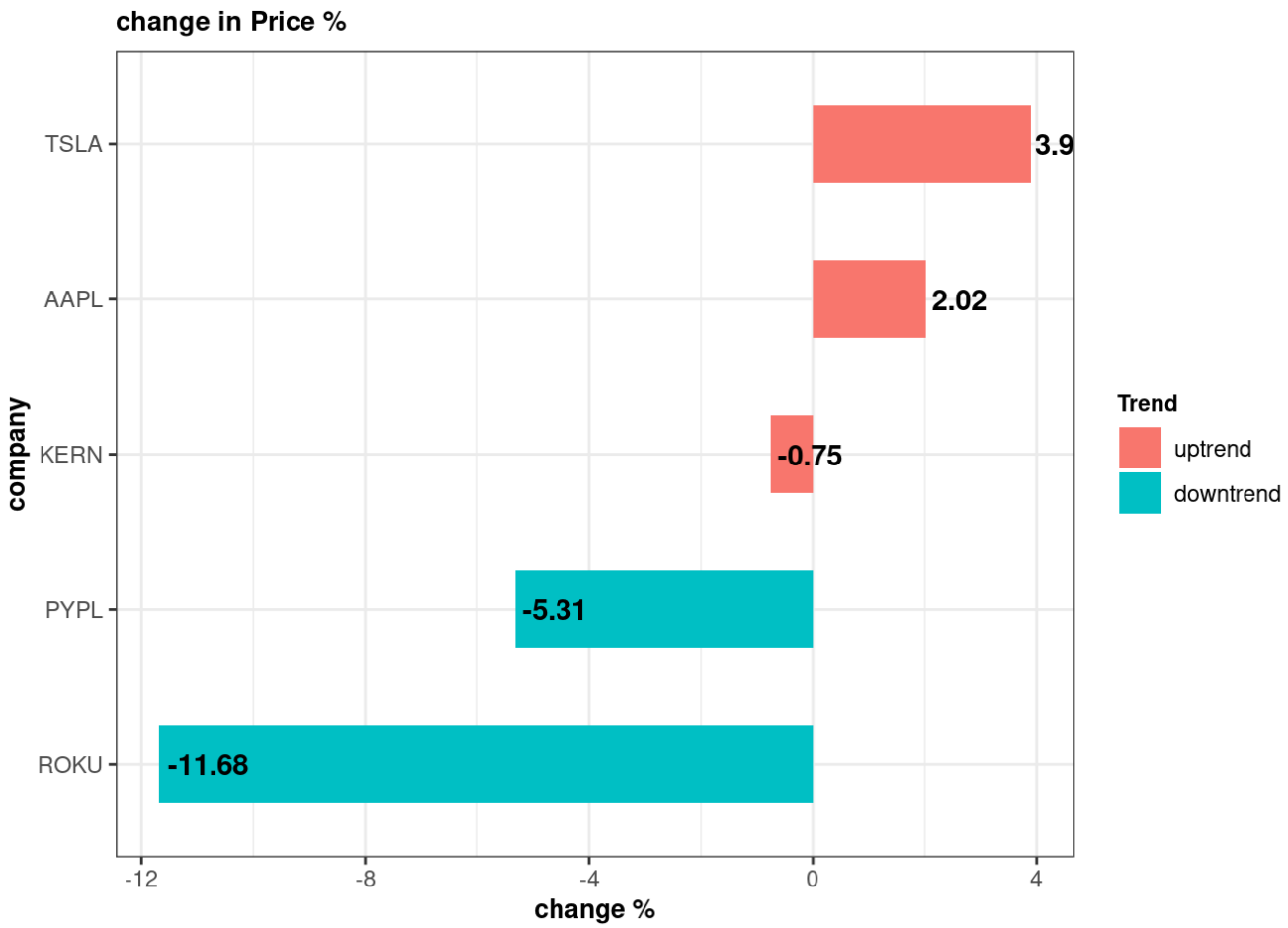

Volume timeserious
volume M
date
downtrend
uptrend
XELA
RUN
JOB
EAT
DNB
ROL
MLSS
AVIR
GKOS
YEXT
KERN
DSGX
alpha
0.001
Company
ARRY
AVIR
DNB
DSGX
EAT
GKOS
HAE
JKS
JOB
KERN
MAS
MLSS
ROL
RUN
WWW
XELA
YEXT

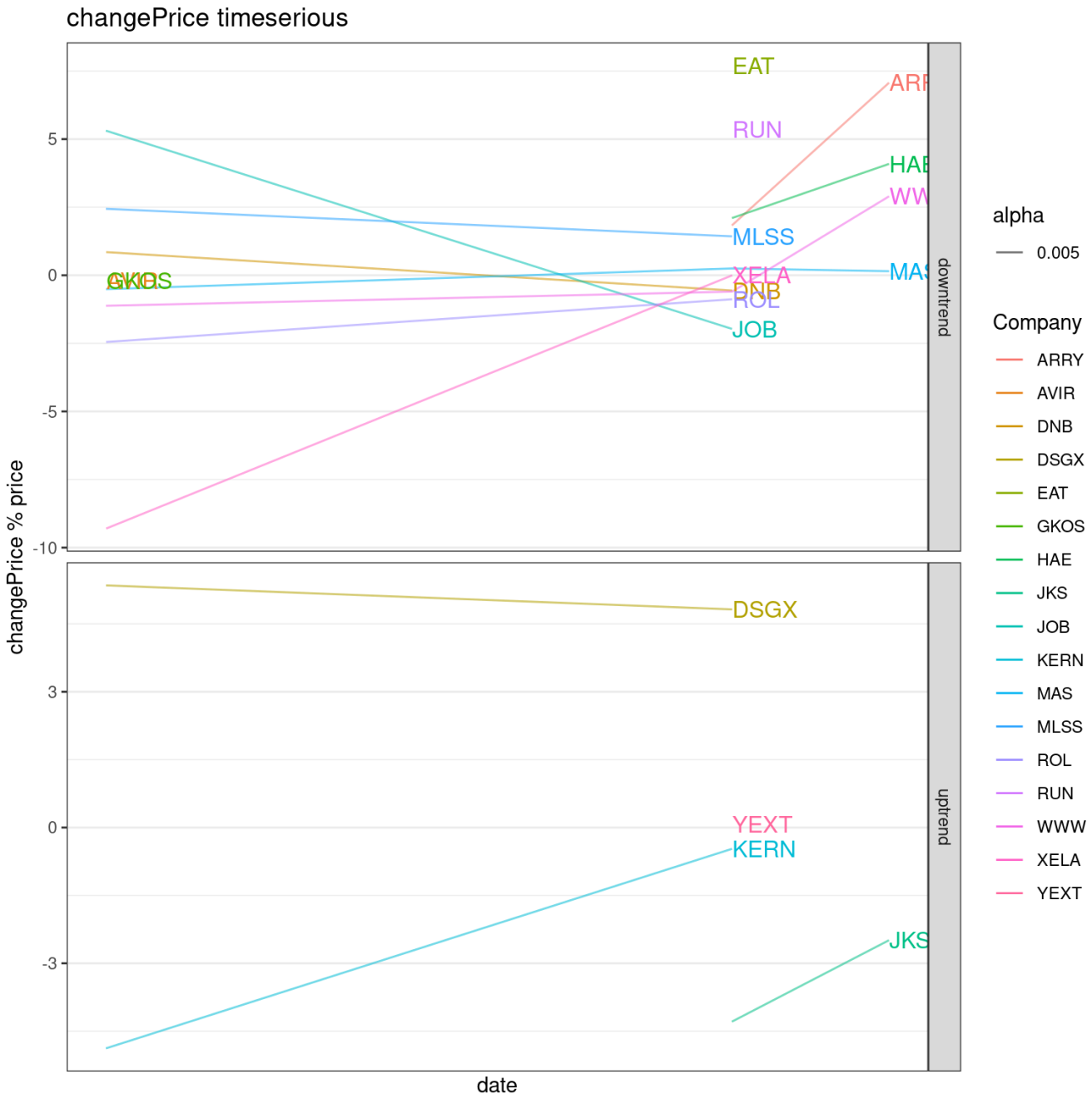

Average Volume M
AAPL
TSLA
PYPL
ROKU
KERN
company
74.
23.52
10.62
3.61
1.33
0
20
40
60
avg.volume M
Trend
uptrend
downtrend

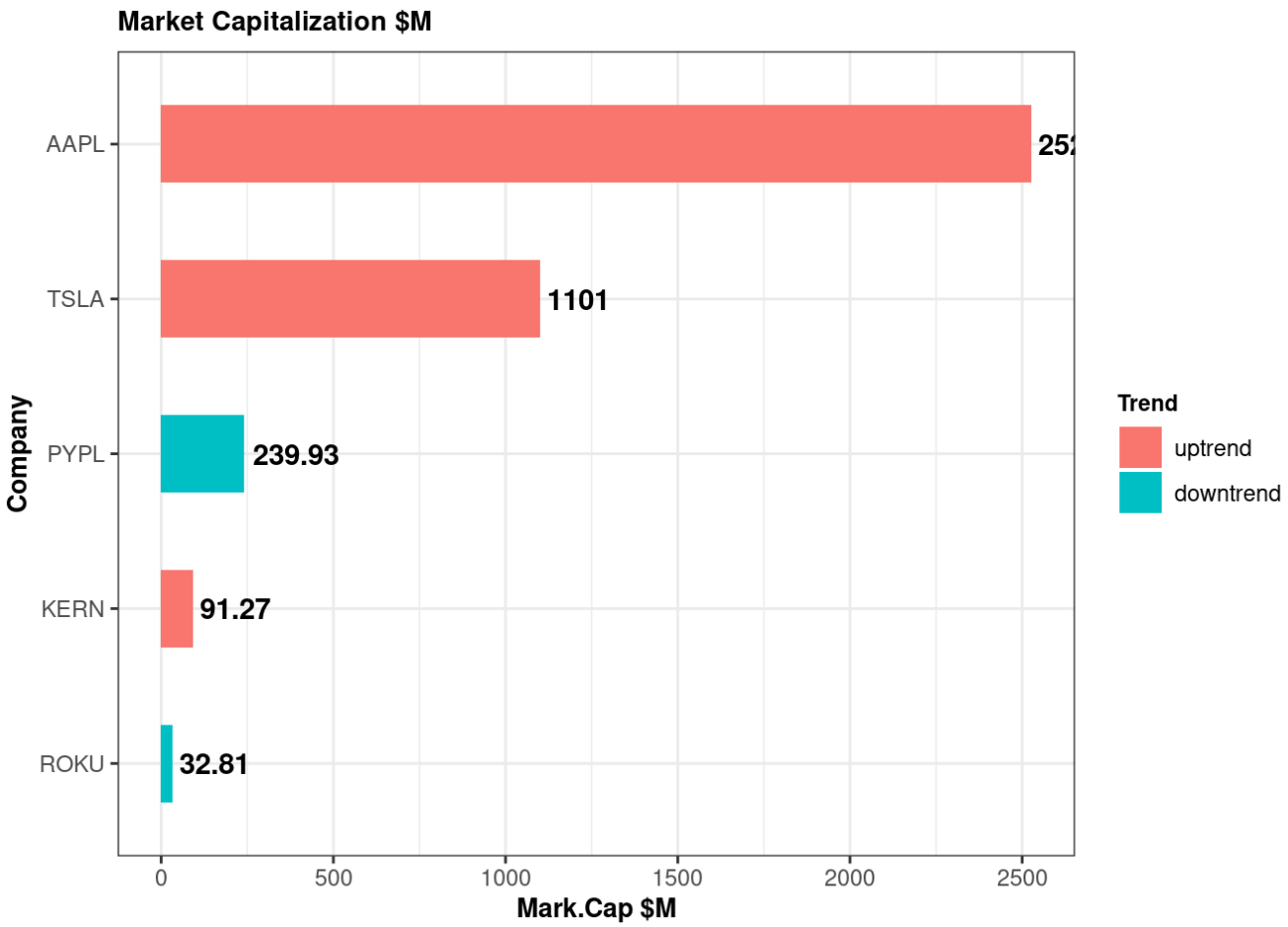

Average Volume timeserious
Avg.volume M
date
downtrend
uptrend
XELA
JOB
RUN
ARR
DNB
MAS
ROL
EAT
HAE
AVIR
GKOS
MLSS
WWW
JKS
KERN
YEXT
DSGX
alpha
0.001
Company
ARRY
AVIR
DNB
DSGX
EAT
GKOS
HAE
JKS
JOB
KERN
MAS
MLSS
ROL
RUN
WWW
XELA
YEXT

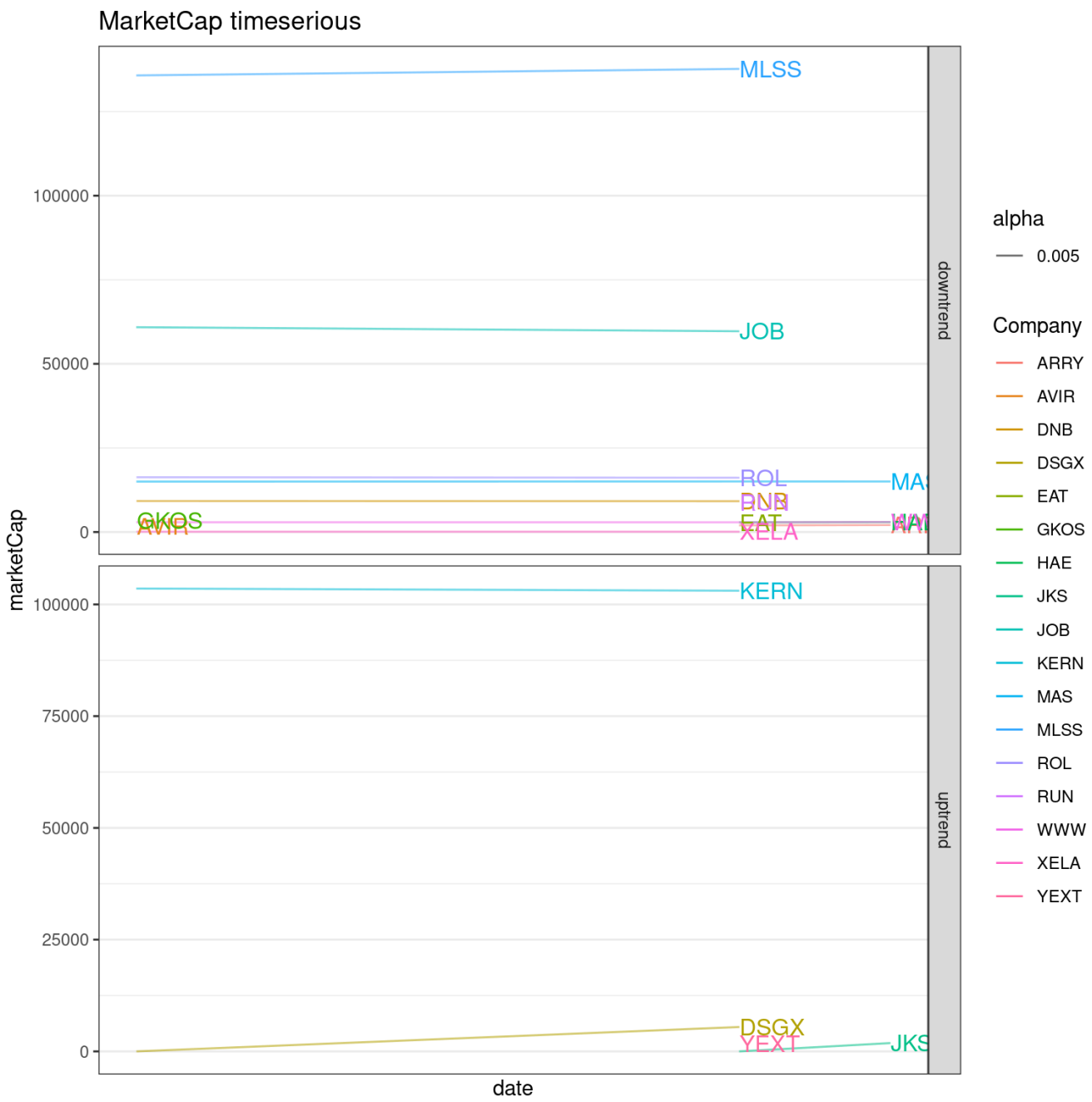

Current Price
TSLA
ROKU
PYPL
AAPL
KERN
244.16
204.21
154.05
2.9775
company
0
300
600
900
price $
Trend
uptrend
downtrend


CurrentPrice timeserious
600
400
200
0
60
40
20
current price
date
downtrend
uptrend
JOB
GKOS
AVIR
EAT
DNB
DSGX
JKS
YEXT
KERN
alpha
0.001
Company
ARRY
AVIR
DNB
DSGX
EAT
GKOS
HAE
JKS
JOB
KERN
MAS
MLSS
ROL
RUN
WWW
XELA
YEXT


change in Price %
TSLA
AAPL
KERN
PYPL
ROKU
company
3.9
2.02
-0.75
-5.31
-11.68
-12
-8
-4
0
4
change %
Trend
uptrend
downtrend

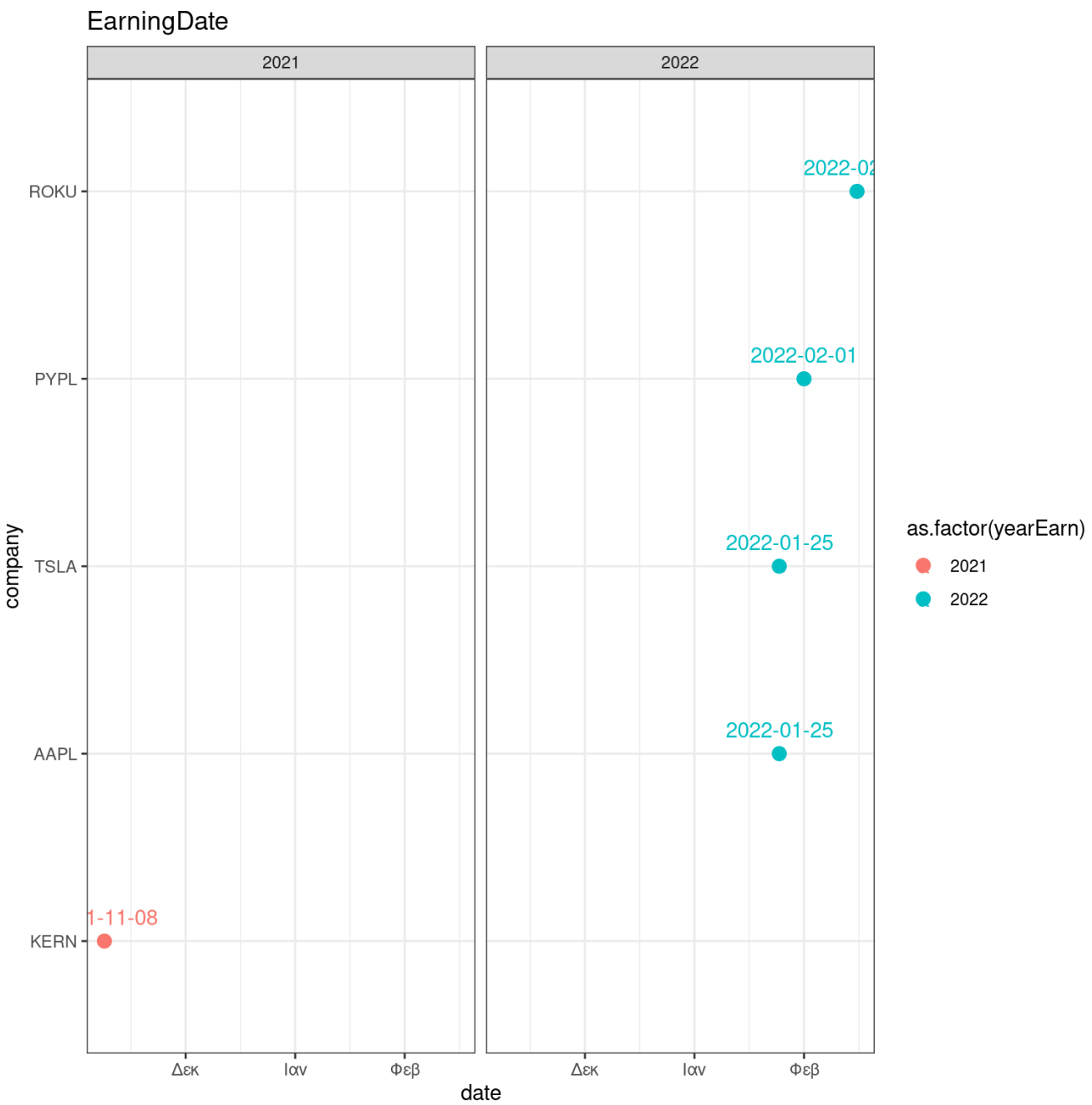

changePrice timeserious
changePrice % price
date
downtrend
uptrend
EAT
RUN
MLSS
XELA
DNB
ROL
JOB
DSGX
YEXT
KERN
JKS
5
0
-5
-10
3
0
-3
alpha
0.005
Company
ARRY
AVIR
DNB
DSGX
EAT
GKOS
HAE
JKS
JOB
KERN
MAS
MLSS
ROL
RUN
WWW
XELA
YEXT

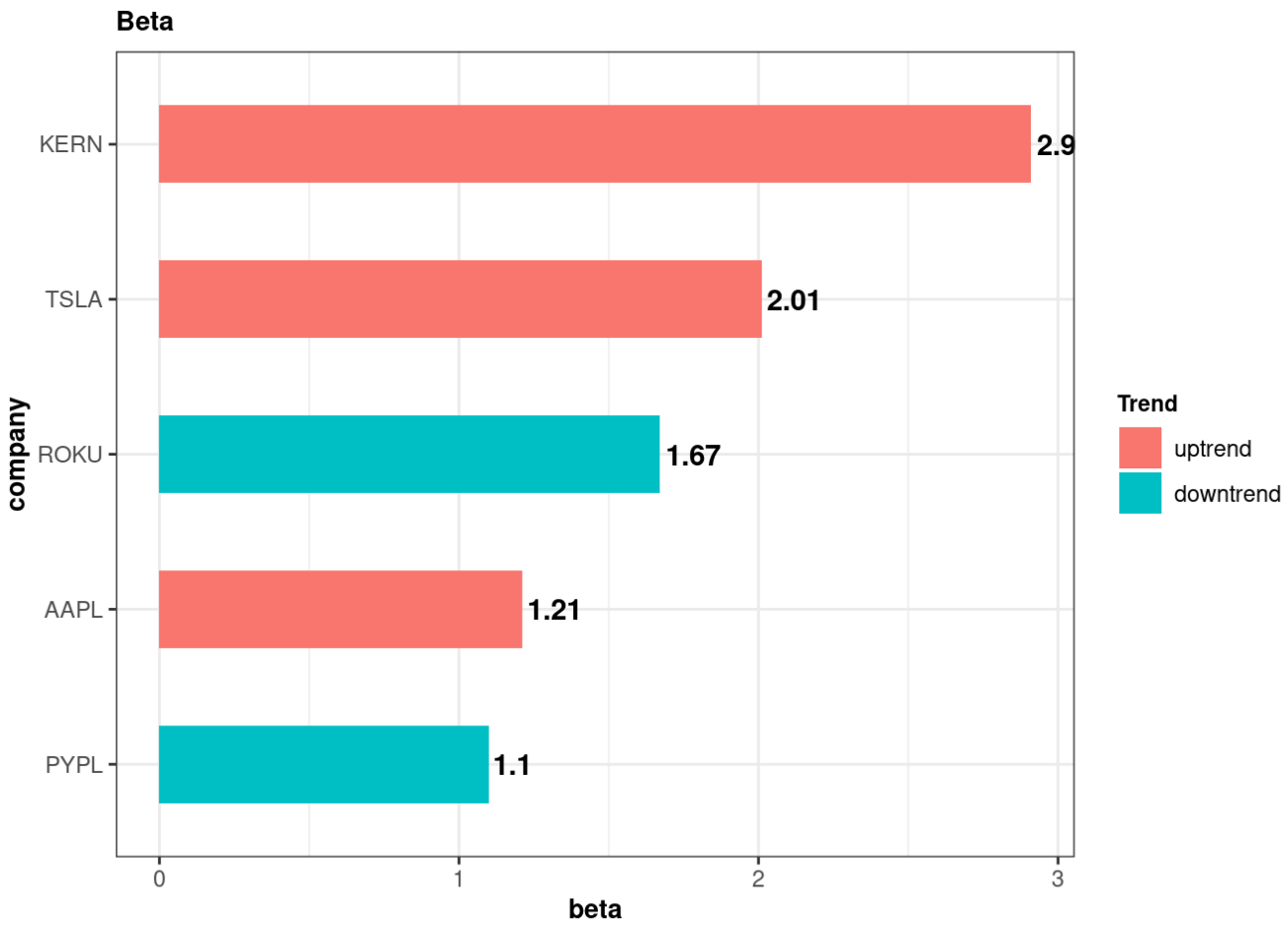

Market Capitalization $M
AAPL
TSLA
PYPL
KERN
ROKU
Company
1101
239.93
91.27
32.81
0
500
1000
1500
2000
2500
Mark.Cap $M
Trend
uptrend
downtrend

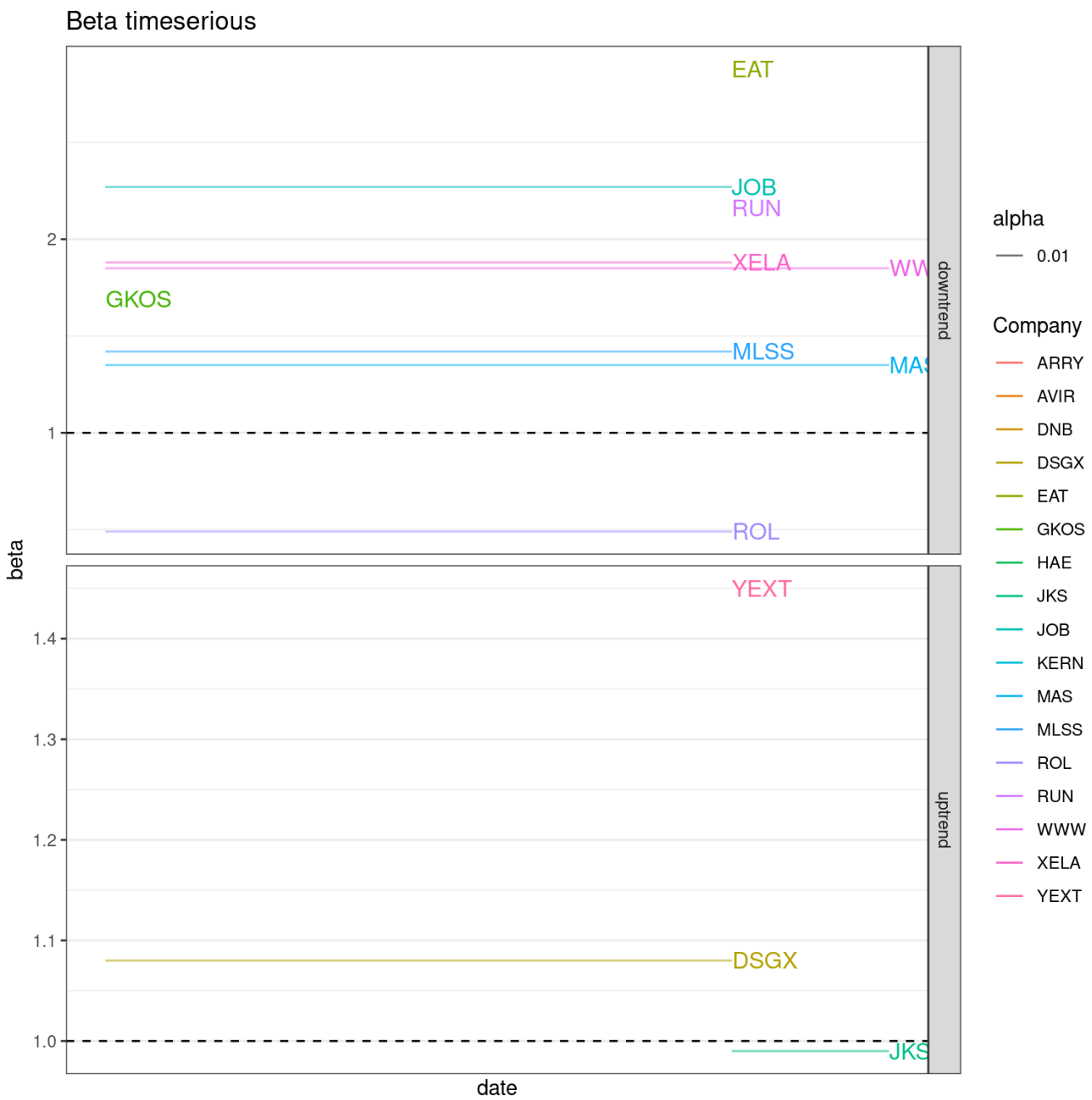



```
## earnings table - list
```

```
##   Company EarningDate
## 1    ROKU  2022-02-16
## 2    PYPL  2022-02-01
## 3    AAPL  2022-01-25
## 4    TSLA  2022-01-25
## 5    KERN  2021-11-08
```


EarningDate
2021
2022
ROKU
PYPL
TSLA
AAPL
KERN
company
2022-02
2022-02-01
2022-01-25
2022-01-25
1-11-08
Δεκ
Ιαν
Φεβ
Δεκ
Ιαν
Φεβ
date
as.factor(yearEarn)
2021
2022


Beta
KERN
TSLA
ROKU
AAPL
PYPL
company
2.9
2.01
1.67
1.21
1.1
0
1
2
3
beta
Trend
uptrend
downtrend

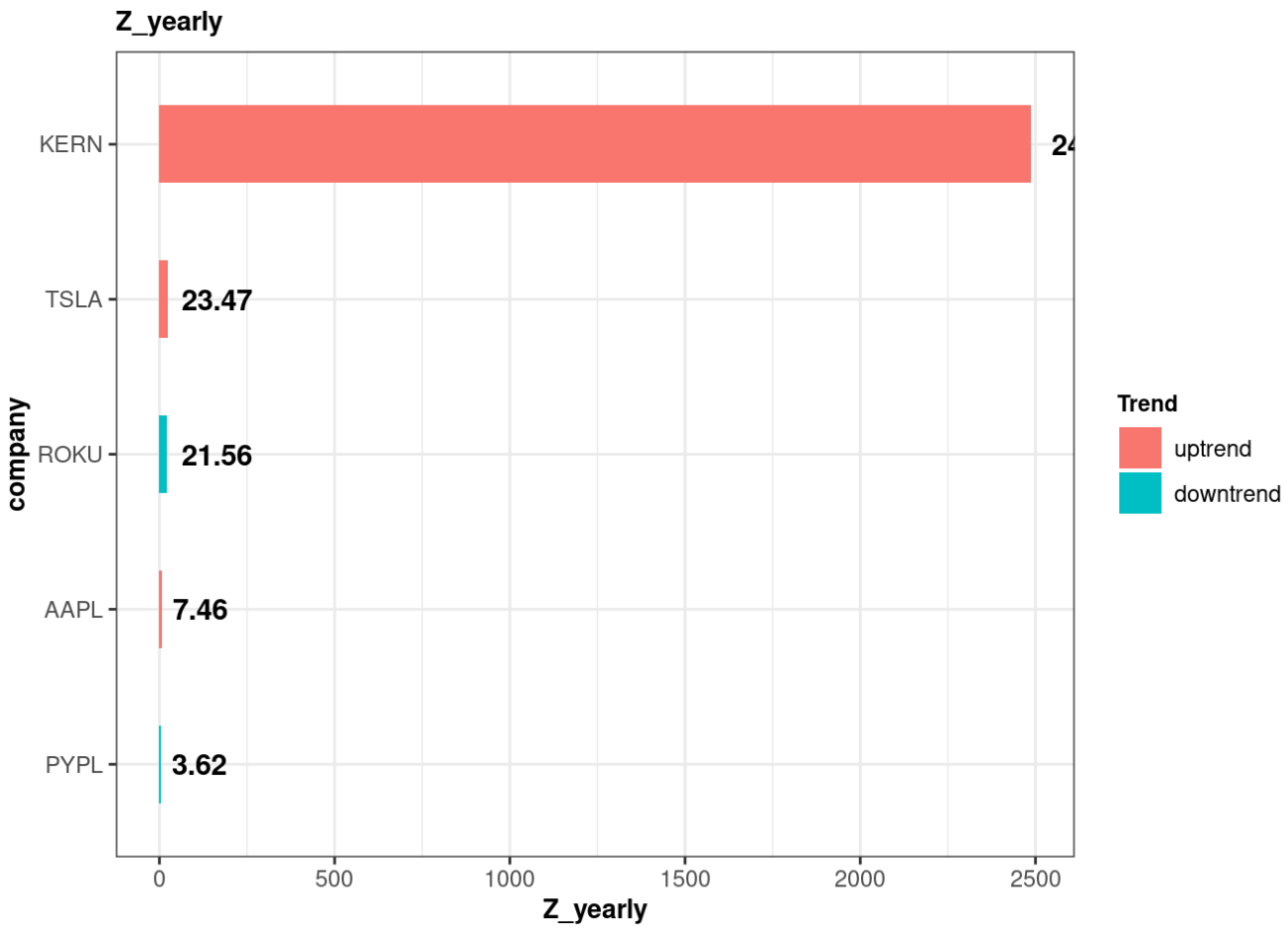


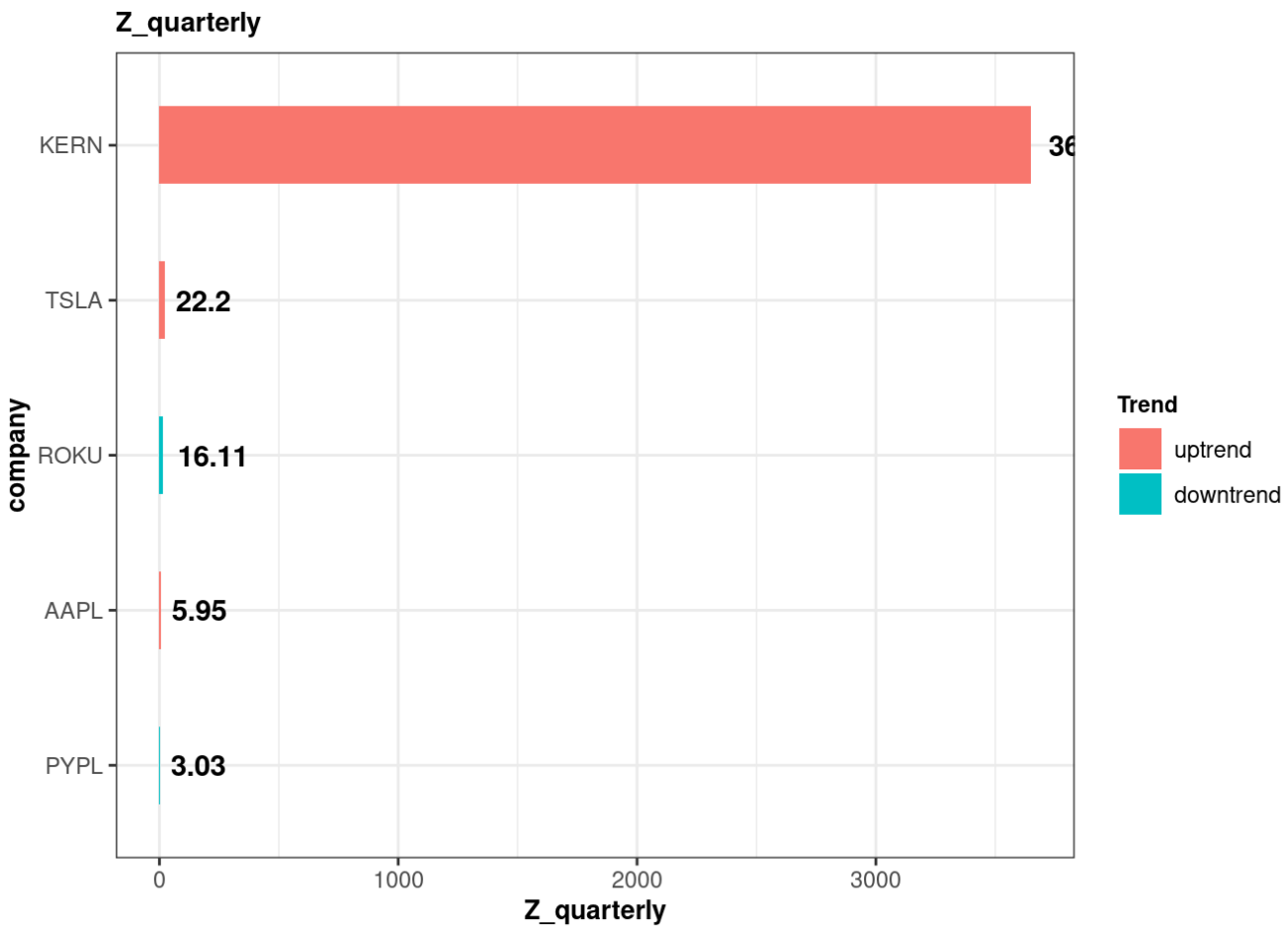
Z-Score = 1.2A + 1.4B + 3.3C + 0.6D + 1.0E

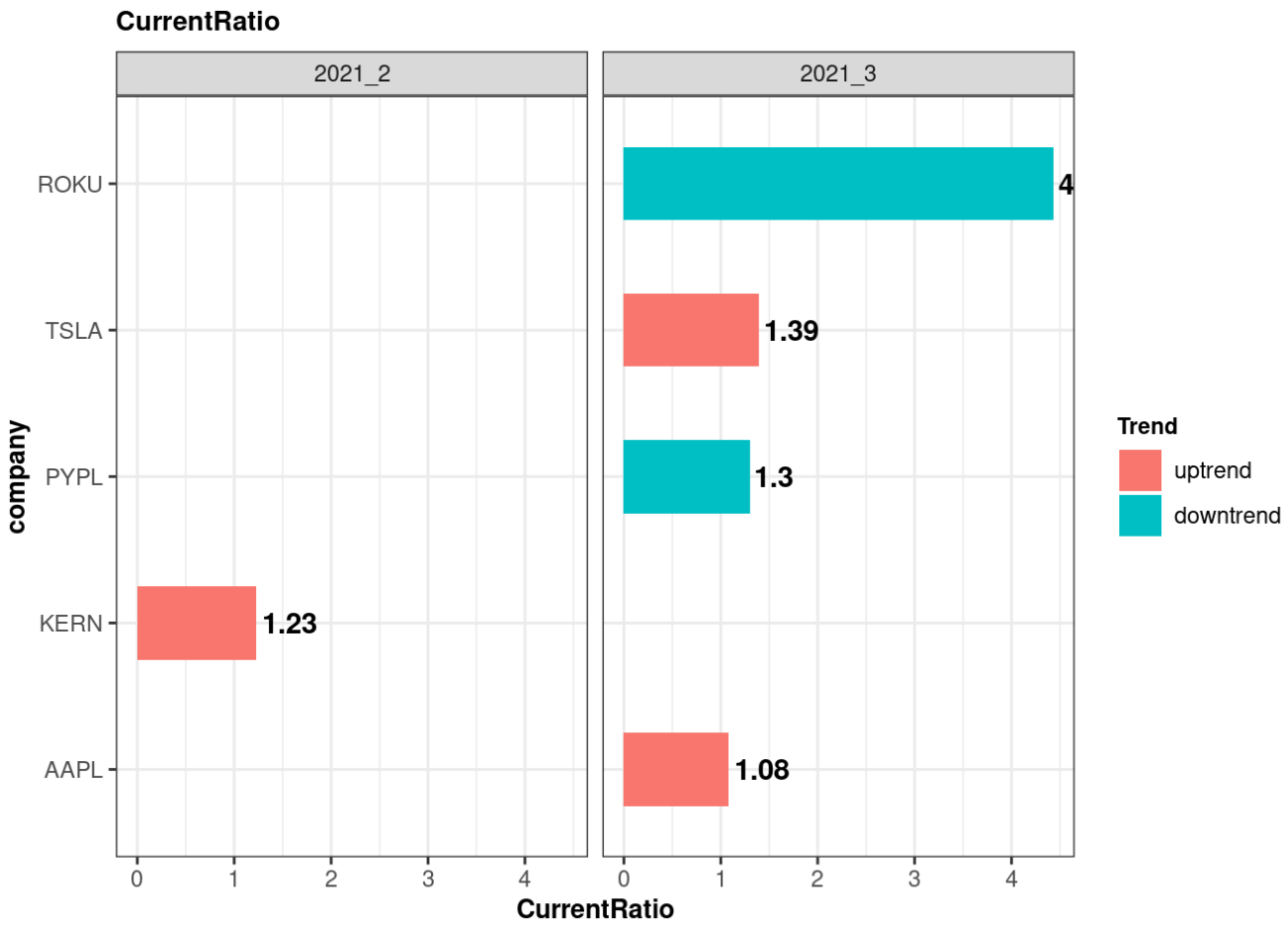
Where:

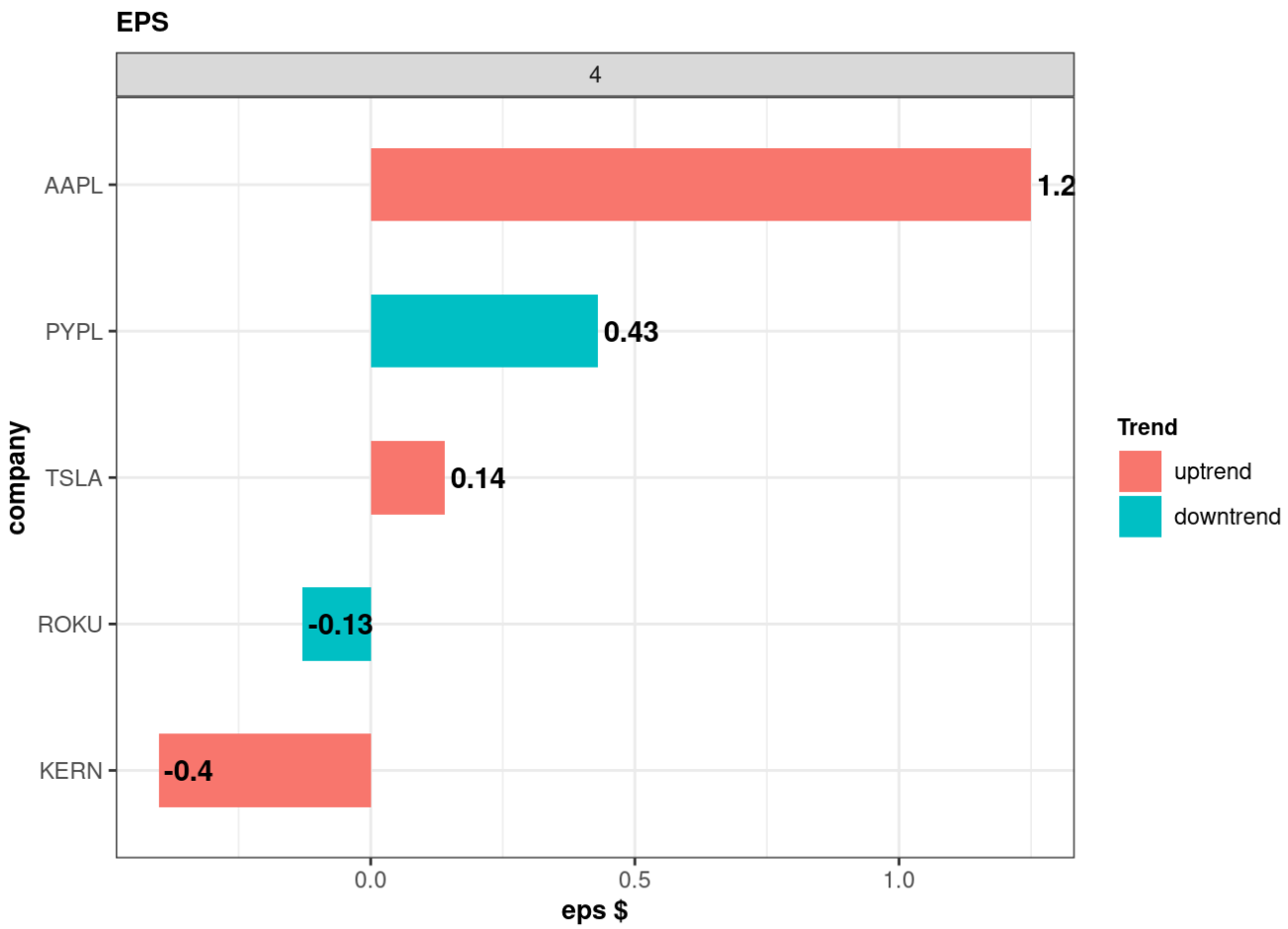
```
A = working capital / total assets
B = retained earnings / total assets
C = earnings before interest and tax / total assets
D = market value of equity / total liabilities
E = sales / total assets
```

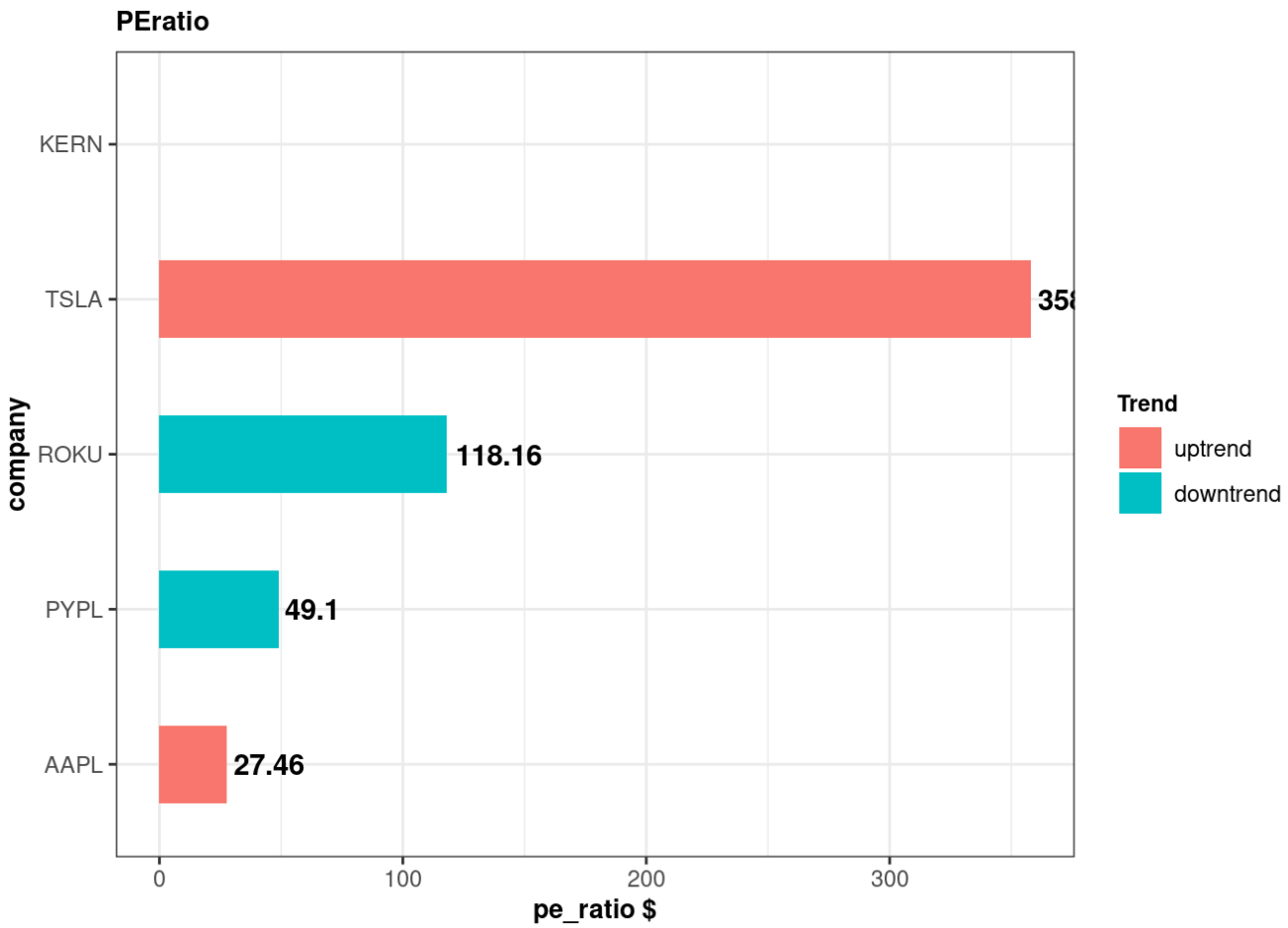
A score below 1.8 means it's likely the company is headed for bankruptcy, while companies with scores above 3 are not likely to go bankrupt.

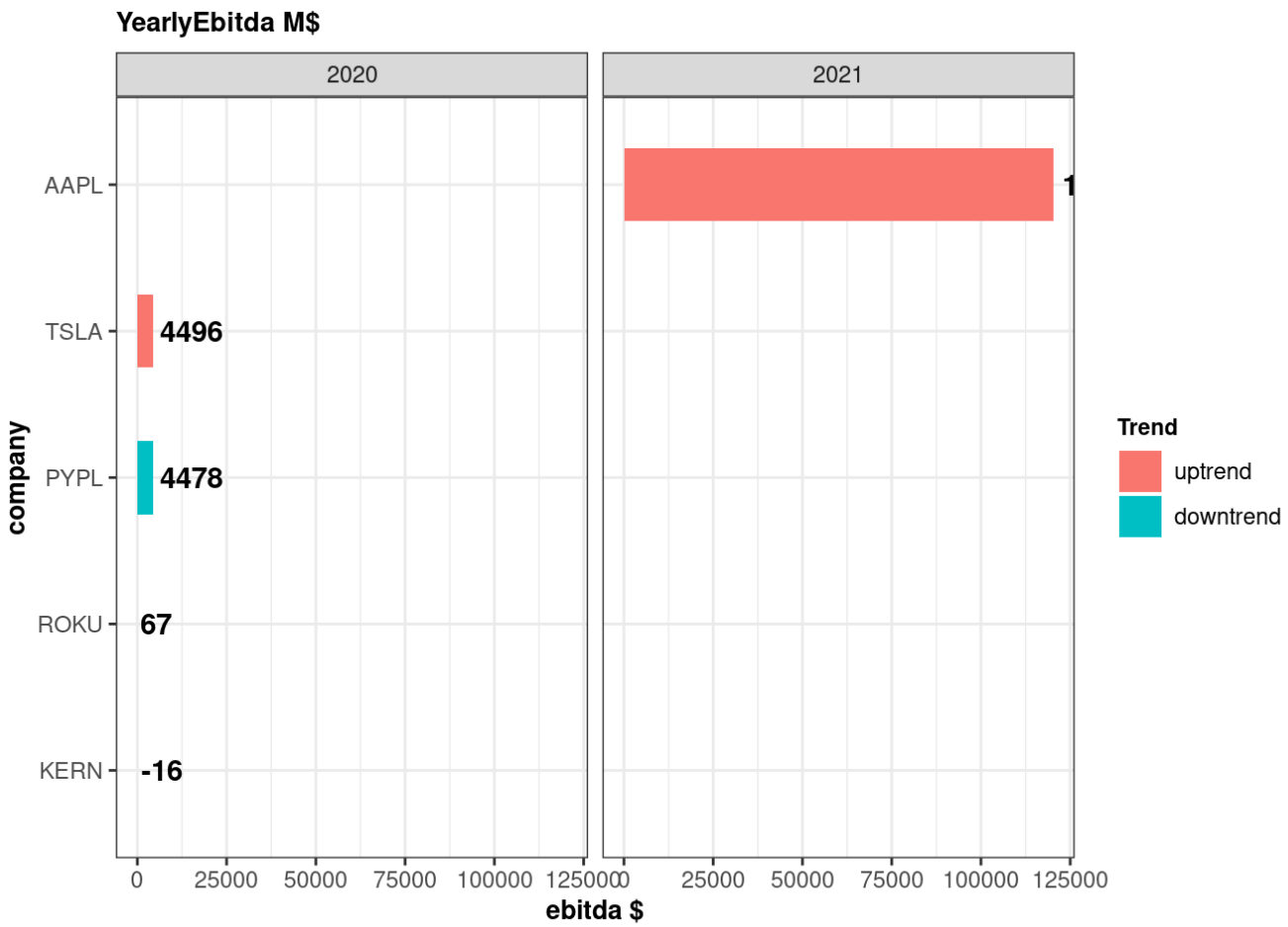

Z_yearly
KERN
TSLA
ROKU
AAPL
PYPL
company
23.47
21.56
7.46
3.62
0
500
1000
1500
2000
2500
Z_yearly
Trend
uptrend
downtrend

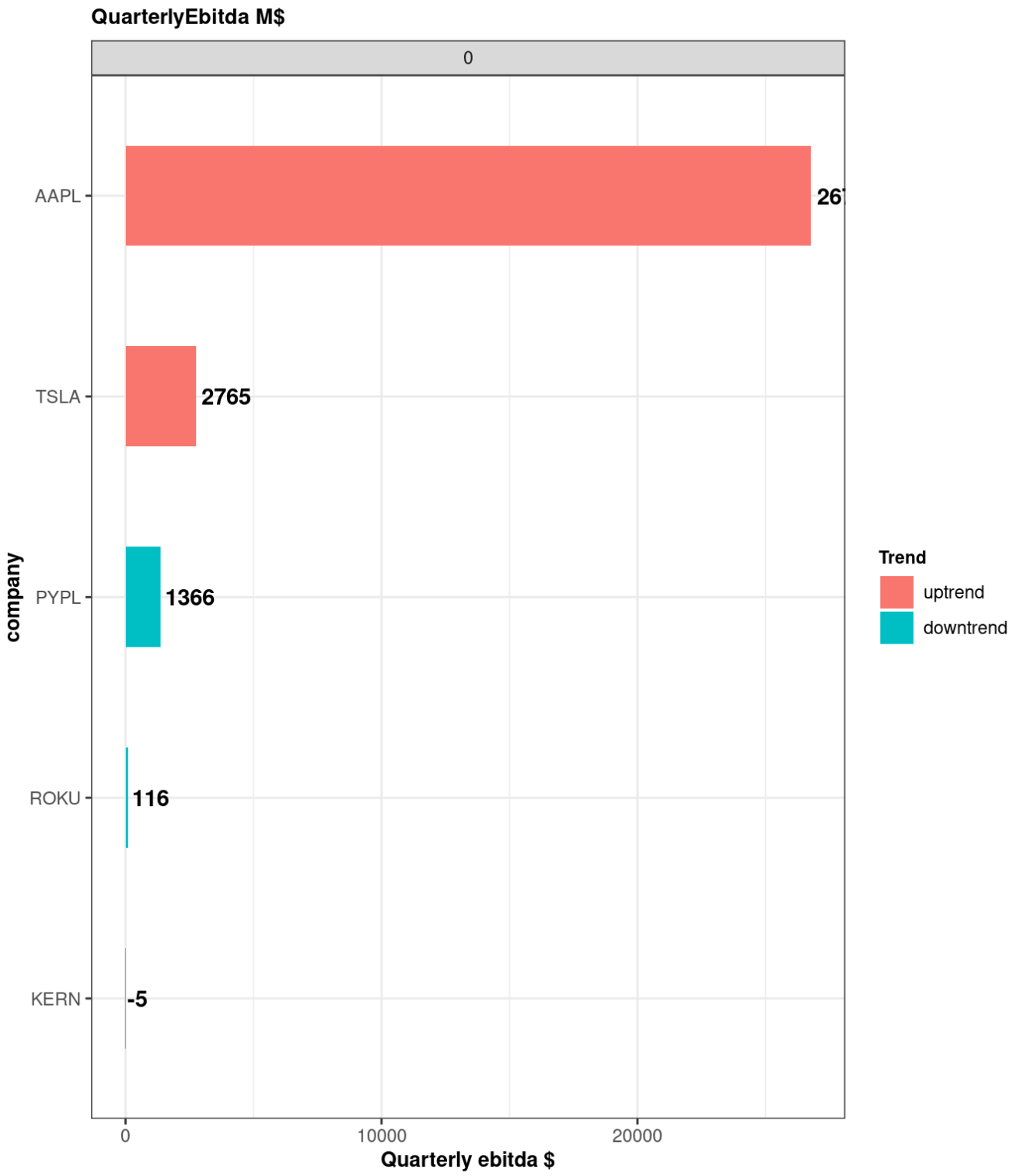

Z_quarterly
KERN
TSLA
ROKU
AAPL
PYPL
company
22.2
16.11
5.95
3.03
0
1000
2000
3000
Z_quarterly
Trend
uptrend
downtrend

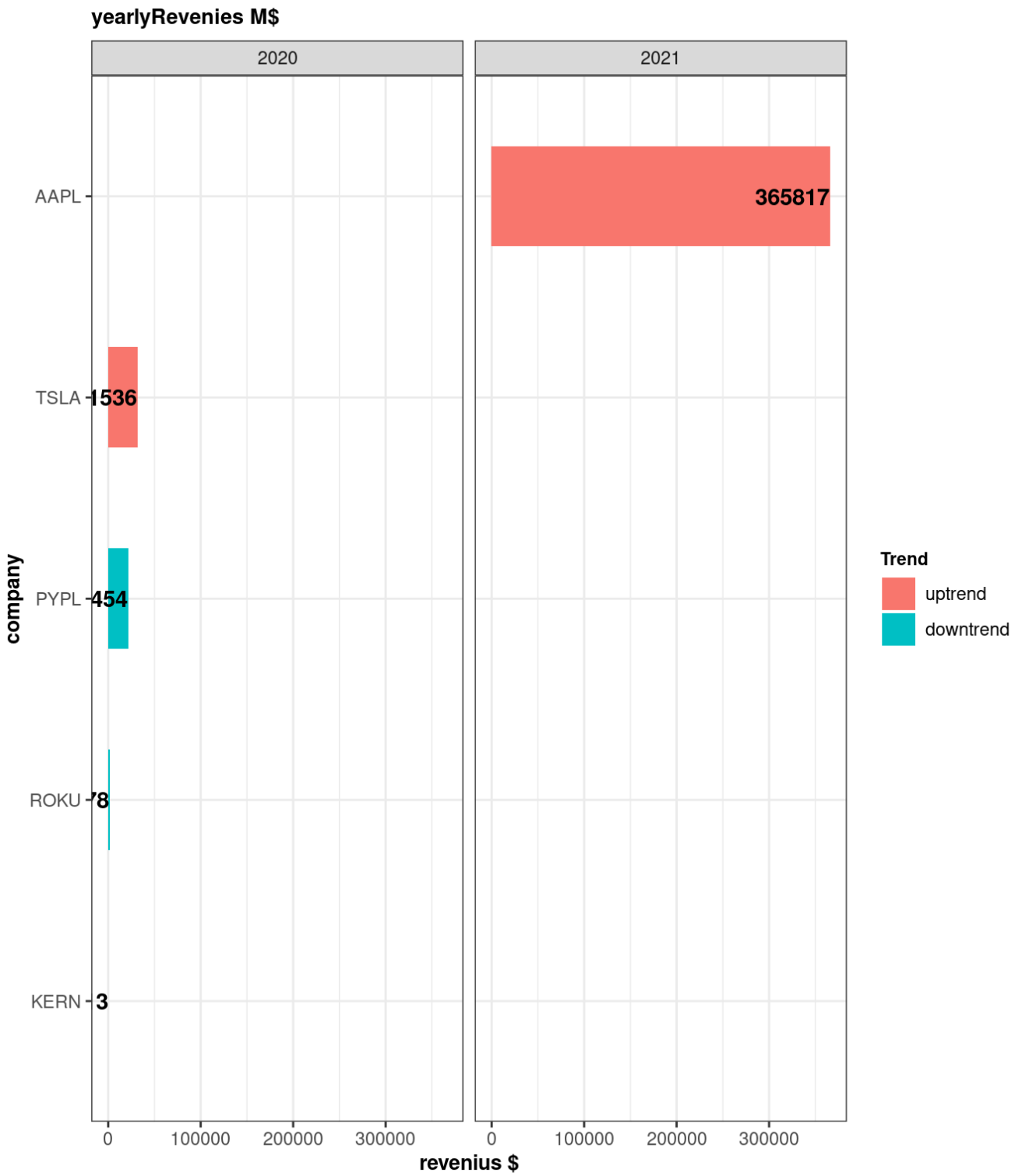

CurrentRatio
2021_2
2021_3
ROKU
TSLA
PYPL
KERN
AAPL
company
4
1.39
1.3
1.23
1.08
0
1
2
3
4
CurrentRatio
Trend
uptrend
downtrend

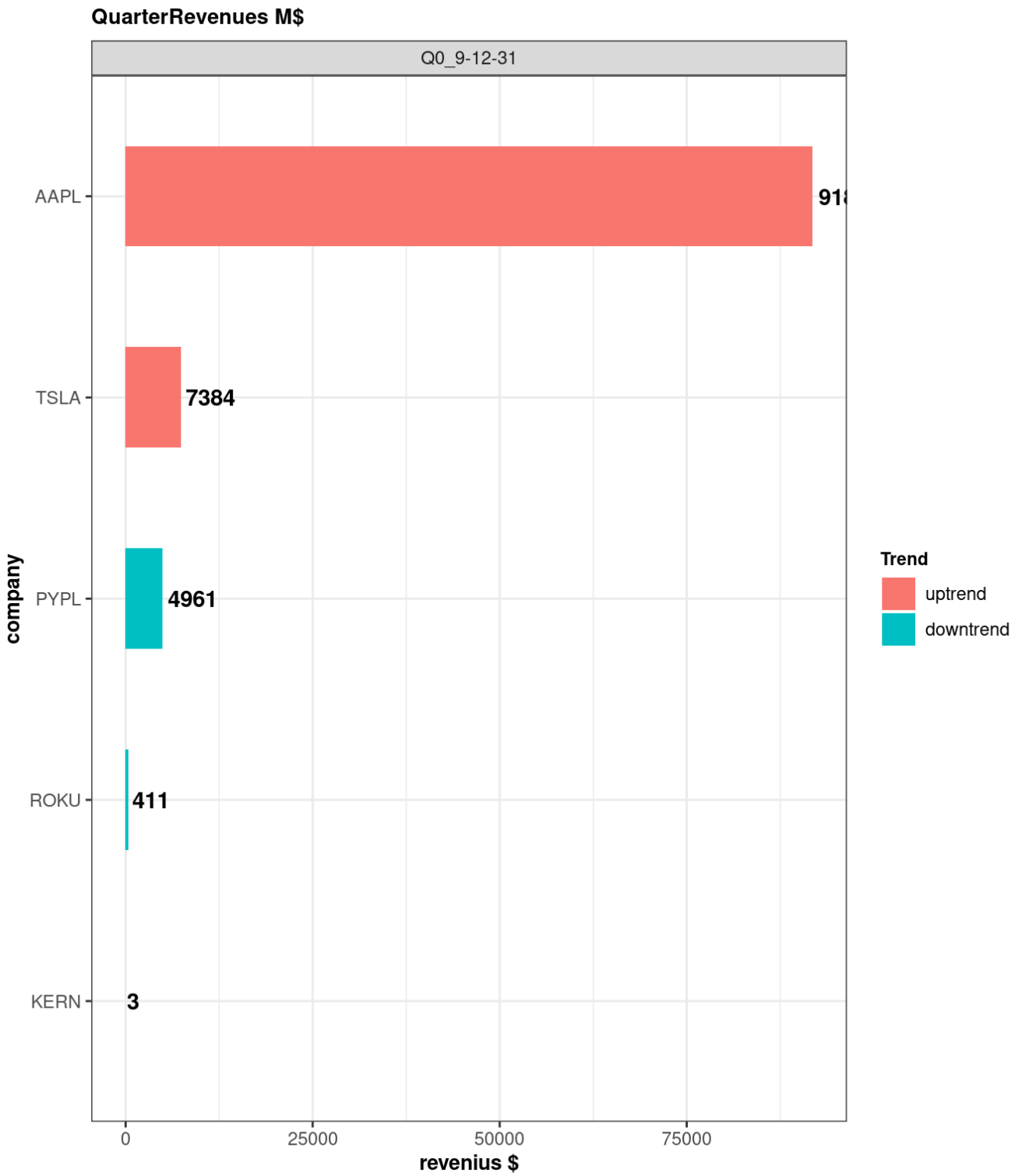

EPS
4
AAPL
PYPL
TSLA
ROKU
KERN
company
1.2
0.43
0.14
-0.13
-0.4
0.0
0.5
1.0
eps $
Trend
uptrend
downtrend

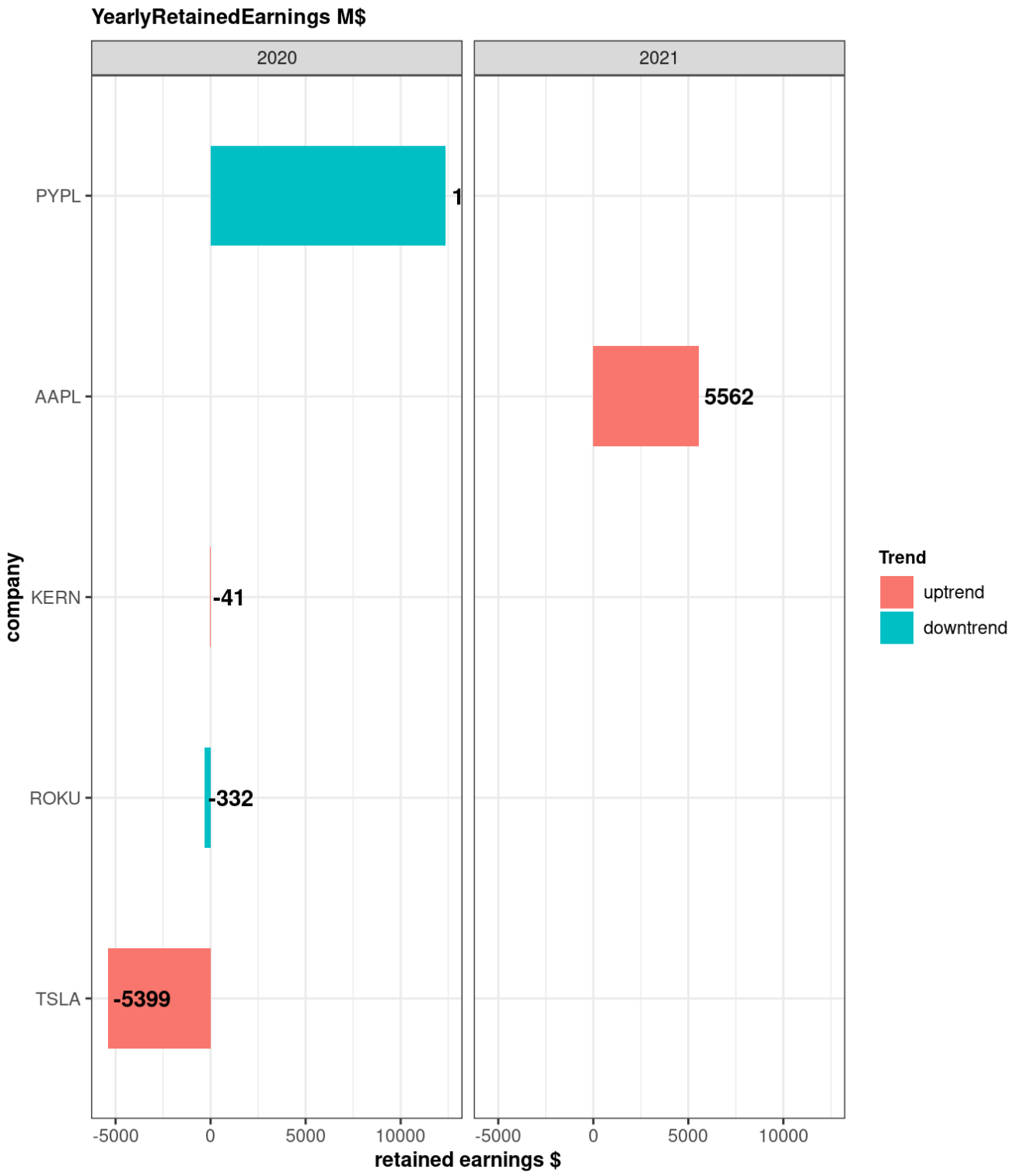

PEratio
KERN
TSLA
ROKU
PYPL
AAPL
company
118.16
49.1
27.46
0
100
200
300
pe_ratio $
Trend
uptrend
downtrend

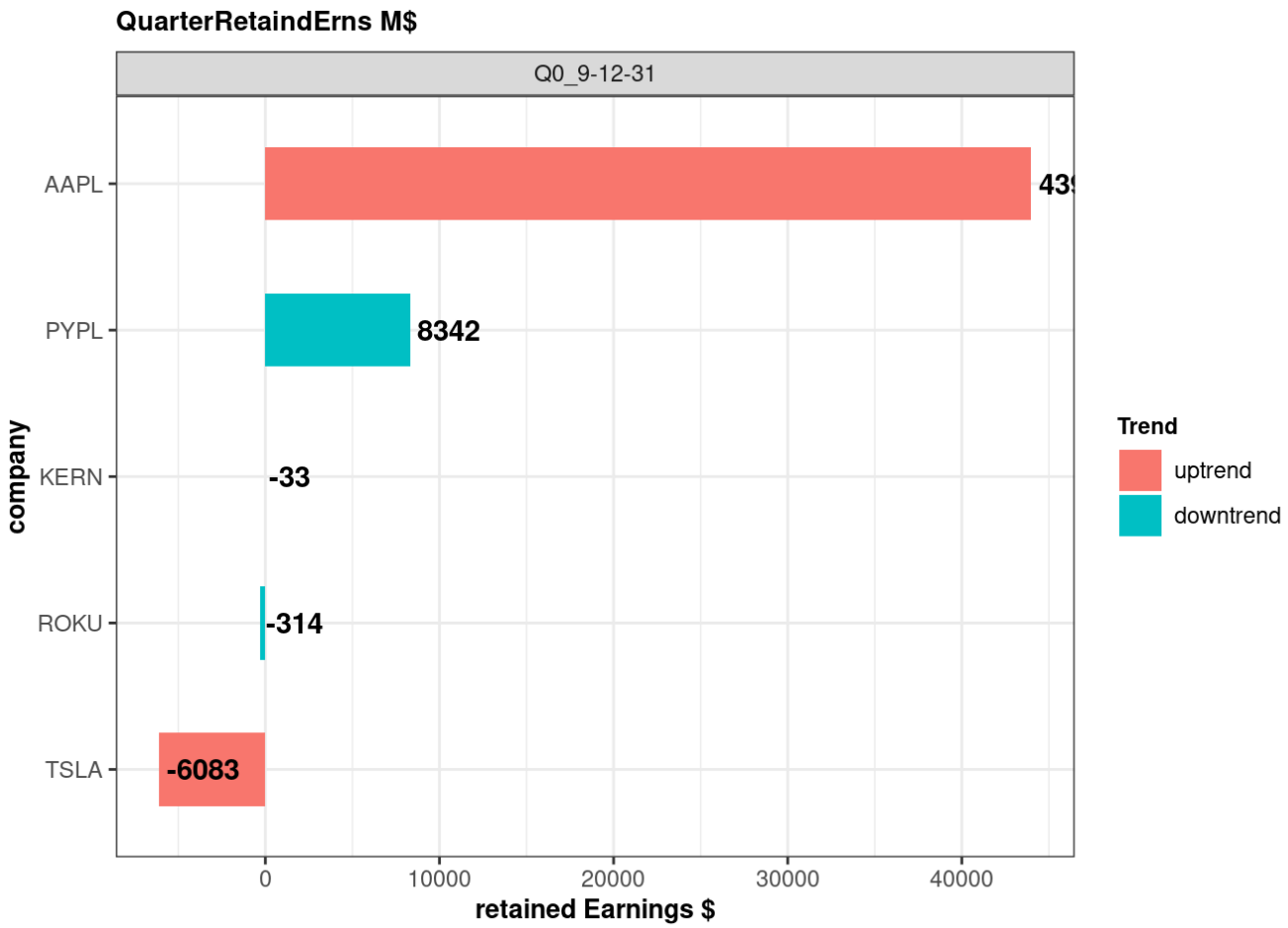

YearlyEbitda M$
2020
2021
AAPL
TSLA
PYPL
ROKU
KERN
company
4496
4478
67
-16
0
25000
50000
75000
100000
125000
ebitda $
Trend
uptrend
downtrend

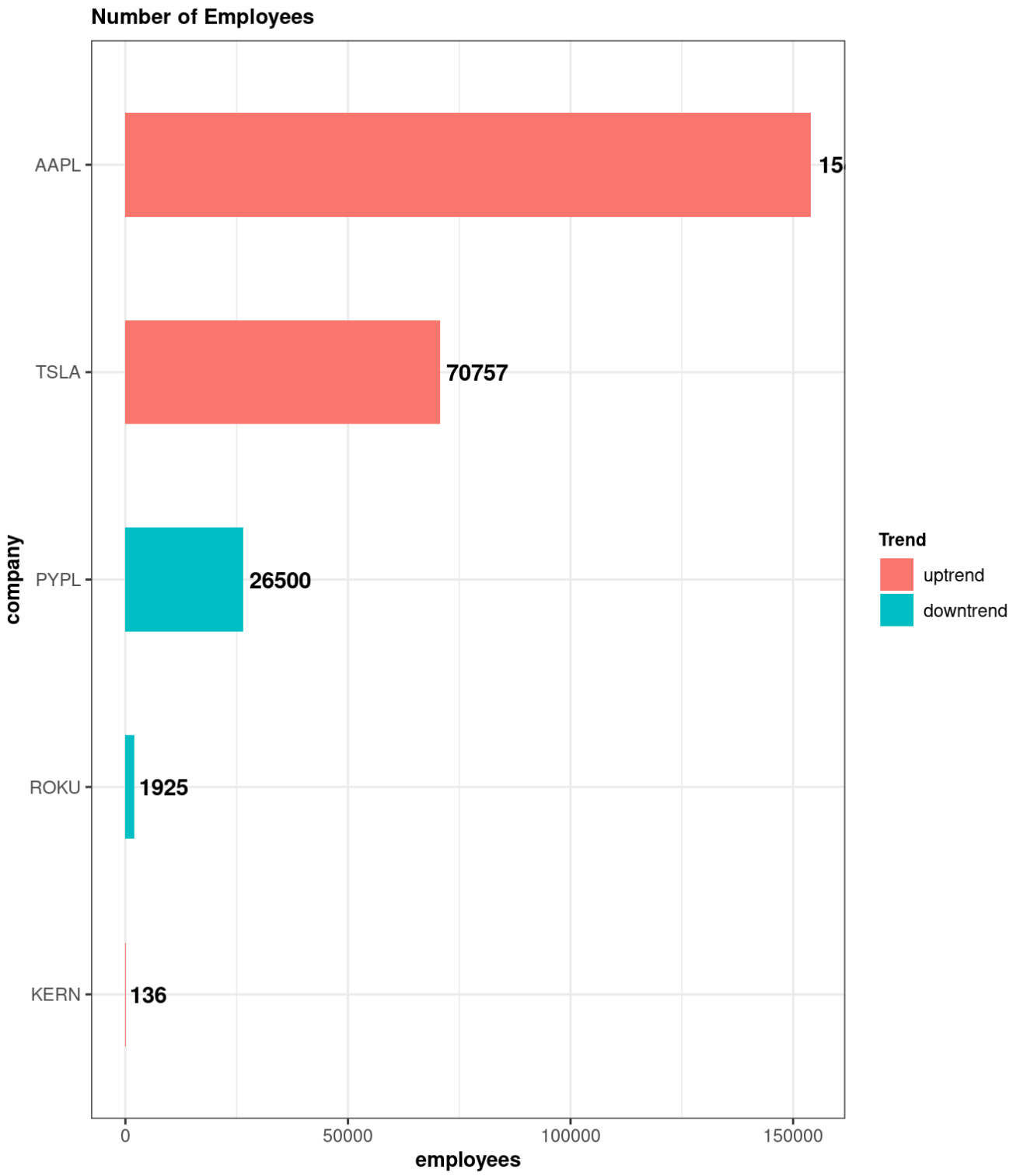

QuarterlyEbitda M$
0
AAPL
TSLA
PYPL
ROKU
KERN
company
2765
1366
116
-5
0
10000
20000
Quarterly ebitda $
Trend
uptrend
downtrend


yearlyRevenies M$
2020
2021
AAPL
TSLA
PYPL
ROKU
KERN
company
365817
1536
454
78
3
0
100000
200000
300000
revenius $
Trend
uptrend
downtrend


QuarterRevenues M$
Q0_9-12-31
AAPL
TSLA
PYPL
ROKU
KERN
7384
4961
411
3
company
0
25000
50000
75000
revenius $
Trend
uptrend
downtrend


YearlyRetainedEarnings M$
2020
2021
PYPL
AAPL
KERN
ROKU
TSLA
company
1
5562
-41
-332
-5399
-5000
0
5000
10000
retained earnings $
Trend
uptrend
downtrend


QuarterRetaindErns M$
Q0_9-12-31
AAPL
PYPL
KERN
ROKU
TSLA
company
43
8342
-33
-314
-6083
0
10000
20000
30000
40000
retained Earnings $
Trend
uptrend
downtrend


Number of Employees
AAPL
TSLA
PYPL
ROKU
KERN
company
15
70757
26500
1925
136
0
50000
100000
150000
employees
Trend
uptrend
downtrend