RV

Collaborative project

4/9/2021

```
library(tidyquant)
```

```
## Loading required package: lubridate
```

```
##
## Attaching package: 'lubridate'
```

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

```
## Loading required package: PerformanceAnalytics
```

```
## Loading required package: xts
```

```
## Loading required package: zoo
```

```
##
## Attaching package: 'zoo'
```

```
## The following objects are masked from 'package:base':
##
##     as.Date, as.Date.numeric
```

```
##
## Attaching package: 'PerformanceAnalytics'
```

```
## The following object is masked from 'package:graphics':
##
##     legend
```

```
## Loading required package: quantmod
```

```
## Loading required package: TTR
```

```
## Registered S3 method overwritten by 'quantmod':
##   method            from
##   as.zoo.data.frame zoo
```

```
## == Need to Learn tidyquant? ============================================
## Business Science offers a 1-hour course - Learning Lab #9: Performance Analysis & Portfolio Optimiza
## </> Learn more at: https://university.business-science.io/p/learning-labs-pro </>
```

```
library(tidyverse)
```

```
## -- Attaching packages --------------------------------------- tidyverse 1.3.1 --
```

```
## v ggplot2 3.3.3     v purrr   0.3.4
## v tibble  3.1.2     v dplyr   1.0.6
## v tidyr   1.1.3     v stringr 1.4.0
```

```
## v readr   1.4.0     v forcats 0.5.1
```

```
## -- Conflicts ---------------------------------------- tidyverse_conflicts() --
## x lubridate::as.difftime() masks base::as.difftime()
## x lubridate::date()        masks base::date()
## x dplyr::filter()          masks stats::filter()
## x dplyr::first()           masks xts::first()
## x lubridate::intersect()   masks base::intersect()
## x dplyr::lag()             masks stats::lag()
## x dplyr::last()            masks xts::last()
## x lubridate::setdiff()     masks base::setdiff()
## x lubridate::union()       masks base::union()
```

```
head(FANG)
```

```
## # A tibble: 6 x 8
##   symbol date        open  high   low close    volume adjusted
##   <chr>  <date>     <dbl> <dbl> <dbl> <dbl>     <dbl>    <dbl>
## 1 FB     2013-01-02  27.4  28.2  27.4  28    69846400     28
## 2 FB     2013-01-03  27.9  28.5  27.6  27.8  63140600     27.8
## 3 FB     2013-01-04  28.0  28.9  27.8  28.8  72715400     28.8
## 4 FB     2013-01-07  28.7  29.8  28.6  29.4  83781800     29.4
## 5 FB     2013-01-08  29.5  29.6  28.9  29.1  45871300     29.1
## 6 FB     2013-01-09  29.7  30.6  29.5  30.6 104787700     30.6
```

Natalia. Comments by Martín in italics.

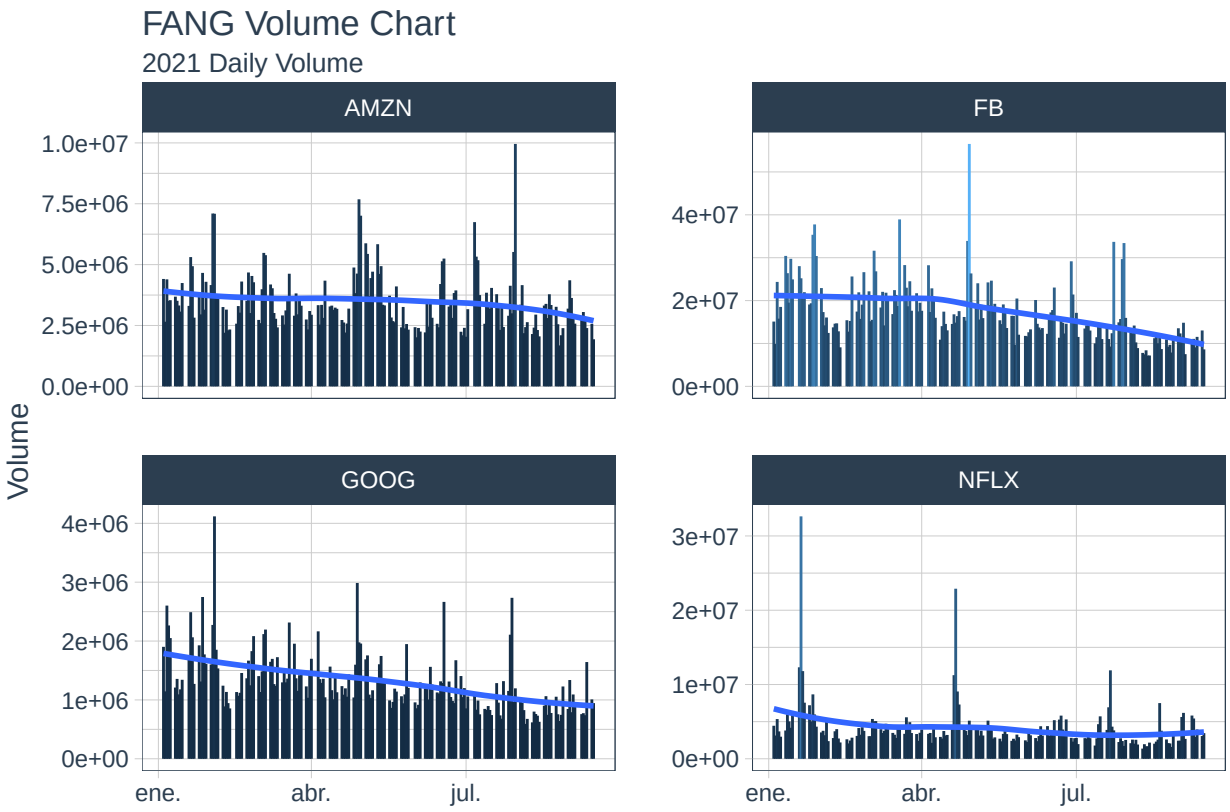
I recommend using the pre-loaded FANG database as it is (with the corresponding length). Here, Natalia downloaded the data and took the first months of the 2021 year. She includes two plots. Are both plots the same? I would recommend adding some comments to understand the plots. Also, remember the objective is to link the volume with the returns as explained in the instructions (readme repo). Martín.

```
FANG_2021<-c("AMZN", "GOOG", "FB", "NFLX") %>%
  tq_get(get = "stock.prices", from = "2021-01-01", to="2021-09-15")
```

```
## Registered S3 method overwritten by 'tune':
##   method                   from
##   required_pkgs.model_spec parsnip
```

```
FANG_2021 %>%
ggplot(aes(x = date, y = volume, group = symbol)) +
    geom_segment(aes(xend = date, yend = 0, color = volume)) +
    geom_smooth(method = "loess", se = FALSE) +
    labs(title = "FANG Volume Chart",
         subtitle = "2021 Daily Volume",
         y = "Volume", x = "") +
  facet_wrap(~ symbol, ncol = 2, scale = "free_y") +
  theme_tq() +
    theme(legend.position = "none")
```

```
## `geom_smooth()` using formula 'y ~ x'
```




```
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FANG_2021 %>%
ggplot(aes(x = date, y = volume, group = symbol)) +
    geom_segment(aes(xend = date, yend = 0, color = volume)) +
    geom_smooth(method = "loess", se = FALSE) +
    labs(title = "FANG Volume Chart",
         subtitle = "2021 Daily Volume",
         y = "Volume", x = "") +
  facet_wrap(~ symbol, ncol = 2, scale = "free_y") +
  theme_tq() +
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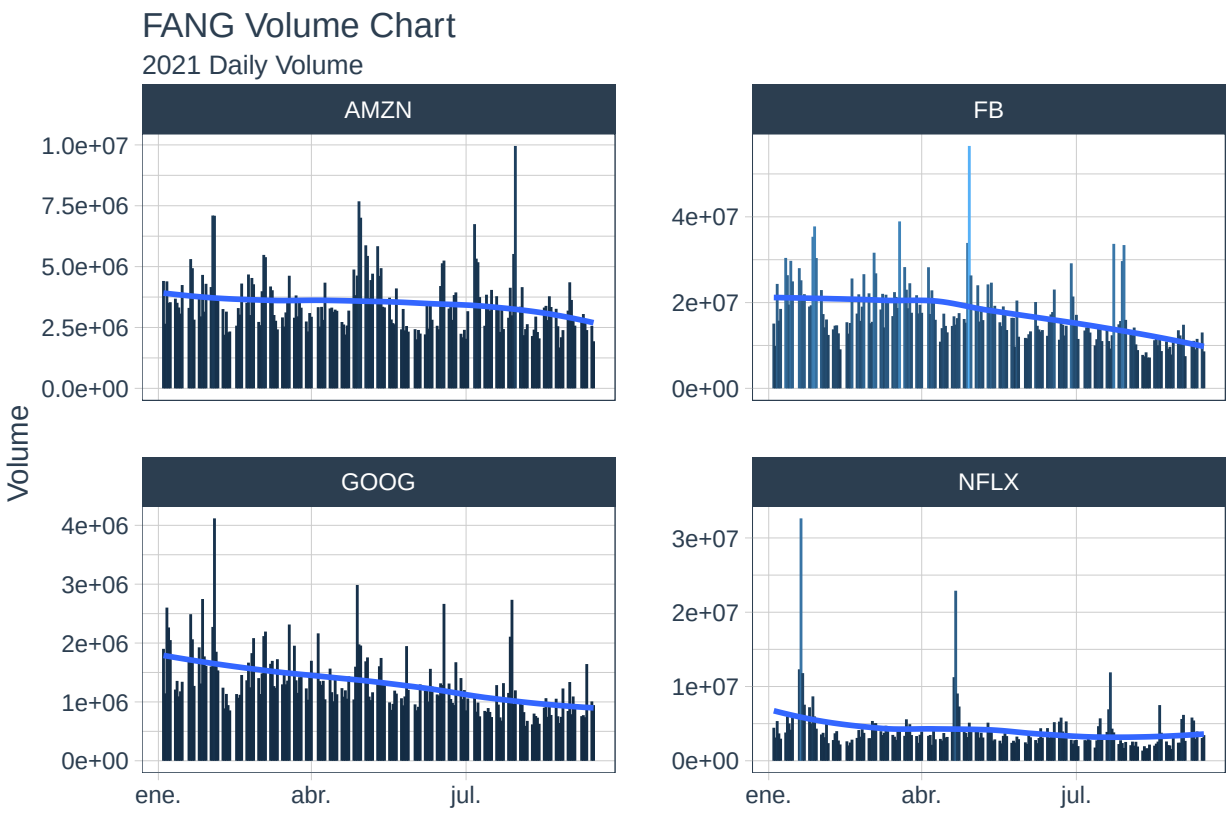
FANG Volume Chart
2021 Daily Volume
AMZN
FB
GOOG
NFLX
Volume
1.0e+07
7.5e+06
5.0e+06
2.5e+06
0.0e+00
4e+07
2e+07
0e+00
4e+06
3e+06
2e+06
1e+06
0e+00
3e+07
2e+07
1e+07
0e+00
ene.
abr.
jul.