looking for xelatex

Landeszentrale für politische Bildung

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TRYING TO RENDER PDF: /c/Users/Robert/AppData/Local/Programs/MiKTeX/miktex/

R Styled tables using tidyverse, gt and the scales packages

$ABBV$ = Abbvie Inc., BTC = Bitcoin, ETH = Etherium

[Torbjorn Storli0(https://www.youtube.com/watch?v=JCVlI4si46o&t=203s) suggests checking out $\{XTS\}$ package that works with {zoo} package. These packages are included with $\{quantmod\}$

How-to Quarto setup chunks

```
knitr::opts_chunk$set()
```

```
library(quantmod)
```

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

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

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

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

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

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

```
library(tidyverse)
```

```
## -- Attaching core tidyverse packages ----------------------- tidyverse 2.0.0 --
## v dplyr     1.1.4     v readr     2.1.5
## v forcats   1.0.0     v stringr   1.5.1
## v ggplot2   3.5.0     v tibble    3.2.1
## v lubridate 1.9.3     v tidyr     1.3.1
## v purrr     1.0.2

## -- Conflicts --------------------------------------- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::first()  masks xts::first()
## x dplyr::lag()    masks stats::lag()
## x dplyr::last()   masks xts::last()
## i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors
```

```
library(gt)
library(scales)
```

```
##
## Attaching package: 'scales'
##
## The following object is masked from 'package:purrr':
##
##     discard
##
## The following object is masked from 'package:readr':
##
##     col_factor
```

```
startdate = as.Date("2014-01-01")
enddate = as.Date("2024-04-09")

 # get daily stock prices for Abbvie inc.
getSymbols("ABBV", from = startdate, to=enddate)
```

```
## [1] "ABBV"
```

Convert Daily stock prices to monthly stock prices

```
monthly_prices <- to.period(ABBV, period = 'months', OHLC = FALSE)

head(monthly_prices)
```

```
##            ABBV.Open ABBV.High ABBV.Low ABBV.Close ABBV.Volume ABBV.Adjusted
## 2014-01-31     49.94     50.55    49.07      49.23    12863500      32.62973
## 2014-02-28     50.84     51.96    50.51      50.91     7095600      33.74324
## 2014-03-31     51.34     51.70    50.95      51.40     4813100      34.06802
## 2014-04-30     51.38     52.17    51.00      52.08     7430600      34.82766
## 2014-05-30     53.98     54.43    53.89      54.33     4025600      36.33230
## 2014-06-30     56.51     56.89    56.10      56.44     6229700      37.74332
```

```
tail(monthly_prices)
```

```
##            ABBV.Open ABBV.High ABBV.Low ABBV.Close ABBV.Volume ABBV.Adjusted
## 2023-11-30    138.01    142.70   138.01     142.39     9297400      141.0424
## 2023-12-29    154.54    155.21   154.41     154.97     3711400      153.5034
## 2024-01-31    165.75    165.86   163.95     164.40     4993900      164.4000
## 2024-02-29    177.87    178.02   175.39     176.05     7485700      176.0500
## 2024-03-28    181.00    182.30   180.30     182.10     5418700      182.1000
## 2024-04-08    169.21    171.97   168.40     169.80     4745000      169.8000
```

Convert data to a tibble; and date index to its own column:

```
ABBV_data <- as_tibble(monthly_prices) |>
  mutate(Date = index(monthly_prices))
```

Clean up the ABBV tibble table

```
ABBV_tibble = ABBV_data |>
  rename(Open = ABBV.Open,
       High = ABBV.High,
       Low = ABBV.Low,
       Close = ABBV.Close,
```

```
        Volume = ABBV.Volume,
        Adjusted = ABBV.Adjusted) |>

dplyr::select(Date, Open, High, Low, Close, Volume, Adjusted)
```

Create a gt table

```
ABBV_gt <- gt(ABBV_tibble)

ABBV_tab <- ABBV_gt |>
 tab_header(

    title = md("**<font color = blue>Abbvie Inc, Monthly Stock Prices</font>**"),
    subtitle = md("**From** 2014 **to** 2024-04-09")
 ) |>
 cols_width(c(Date:Adjusted)  ~ px(120)
  )

ABBV_tab
```

```
## Warning: HTML tags found, and they will be removed.
## * Set `options(gt.html_tag_check = FALSE)` to disable this check.
```

Abbvie Inc, Monthly Stock Pr
From 2014 **to** 2024-04-09

Date	Open	High	Low
16101	49.94	50.55	49.07
16129	50.84	51.96	50.51
16160	51.34	51.70	50.95
16190	51.38	52.17	51.00
16220	53.98	54.43	53.89
16251	56.51	56.89	56.10
16282	53.13	53.40	52.30
16311	55.75	55.80	55.24
16343	58.26	58.81	57.73
16374	63.06	63.99	62.37
16402	69.00	69.48	68.89
16435	66.72	67.10	65.35
16465	62.09	62.68	60.12
16493	60.53	60.99	60.37
16525	58.01	58.81	57.71
16555	65.39	65.92	64.32
16584	67.22	67.52	66.39
16616	68.00	68.22	66.66
16647	70.38	70.38	69.73
16678	64.14	64.31	62.25
16708	53.54	54.50	53.36
16738	57.87	60.73	57.66
16769	59.96	60.21	57.96
16800	59.50	59.93	59.20
16829	53.42	55.31	53.42
16860	55.87	56.00	54.47
16891	57.02	57.46	56.82

16920	61.03	61.45	60.48
16952	62.71	63.49	62.64
16982	61.79	62.02	61.14
17011	65.27	66.40	65.15
17044	64.21	64.45	63.50
17074	62.67	63.26	62.45
17105	57.06	57.30	55.72
17135	61.63	61.84	60.63
17165	62.73	62.93	62.41
17197	60.01	61.32	59.75
17225	62.11	62.40	61.69
17256	65.46	65.52	65.15
17284	66.06	66.32	65.44
17317	66.24	66.41	65.61
17347	72.57	72.82	72.21
17378	70.52	70.58	69.83
17409	74.11	75.40	73.92
17438	88.69	89.35	87.67
17470	90.88	91.82	90.04
17500	96.36	97.53	96.21
17529	98.14	98.43	96.71
17562	116.21	116.50	111.29
17590	119.00	120.00	115.78
17619	94.52	95.54	93.50
17651	99.05	99.42	96.52
17682	100.93	101.10	98.50
17711	92.84	94.46	92.56
17743	91.65	92.63	91.33
17774	96.25	96.69	95.72
17802	94.00	95.16	93.84
17835	80.98	81.58	77.74
17865	90.26	94.27	89.87
17896	91.60	92.99	91.23
17927	78.95	81.31	78.71
17955	79.46	79.71	78.75
17984	80.08	80.90	79.96
18016	80.68	80.69	78.68
18047	77.31	77.57	76.40
18075	70.58	72.74	70.33
18108	66.91	67.38	65.63
18138	66.40	66.43	65.49
18169	74.95	76.44	74.95
18200	79.71	79.74	78.74
18229	88.00	88.09	87.22
18261	88.21	88.60	87.88
18292	81.54	81.72	80.41
18320	82.79	85.71	81.58
18352	75.40	77.92	74.44
18382	82.97	83.26	81.23
18411	91.00	92.89	89.60
18443	95.97	98.88	95.83
18474	95.54	97.25	93.55
18505	94.12	96.01	94.01
18535	87.00	88.44	86.81

18565	83.20	86.14	83.00
18596	105.12	105.42	103.65
18627	105.26	107.28	104.85
18656	104.00	104.49	101.81
18684	107.68	108.58	105.36
18717	106.88	109.18	106.80
18747	111.47	112.31	110.11
18775	113.33	114.48	112.86
18808	112.21	112.92	111.63
18838	119.00	119.15	116.12
18870	120.83	121.17	120.03
18900	109.20	110.42	107.78
18929	112.09	114.92	111.42
18961	116.68	116.79	115.10
18992	136.04	136.21	135.30
19023	136.82	137.17	135.62
19051	146.65	148.08	145.76
19082	162.93	164.66	162.10
19111	149.56	149.86	139.93
19143	148.64	148.88	146.67
19173	153.17	154.04	150.87
19202	145.44	146.30	139.05
19235	135.69	136.04	134.17
19265	142.20	142.32	134.09
19296	145.17	146.78	144.08
19326	158.79	161.18	156.46
19356	162.23	162.85	159.82
19388	145.63	147.85	144.41
19416	153.96	154.37	152.62
19447	158.43	159.57	157.73
19475	147.97	151.39	147.44
19508	136.62	138.71	135.77
19538	133.47	135.93	132.80
19569	150.43	150.50	147.62
19600	148.39	148.71	146.87
19629	152.46	152.53	148.83
19661	142.09	142.22	139.68
19691	138.01	142.70	138.01
19720	154.54	155.21	154.41
19753	165.75	165.86	163.95
19782	177.87	178.02	175.39
19810	181.00	182.30	180.30
19821	169.21	171.97	168.40