

Coffee Price Technical Analysis

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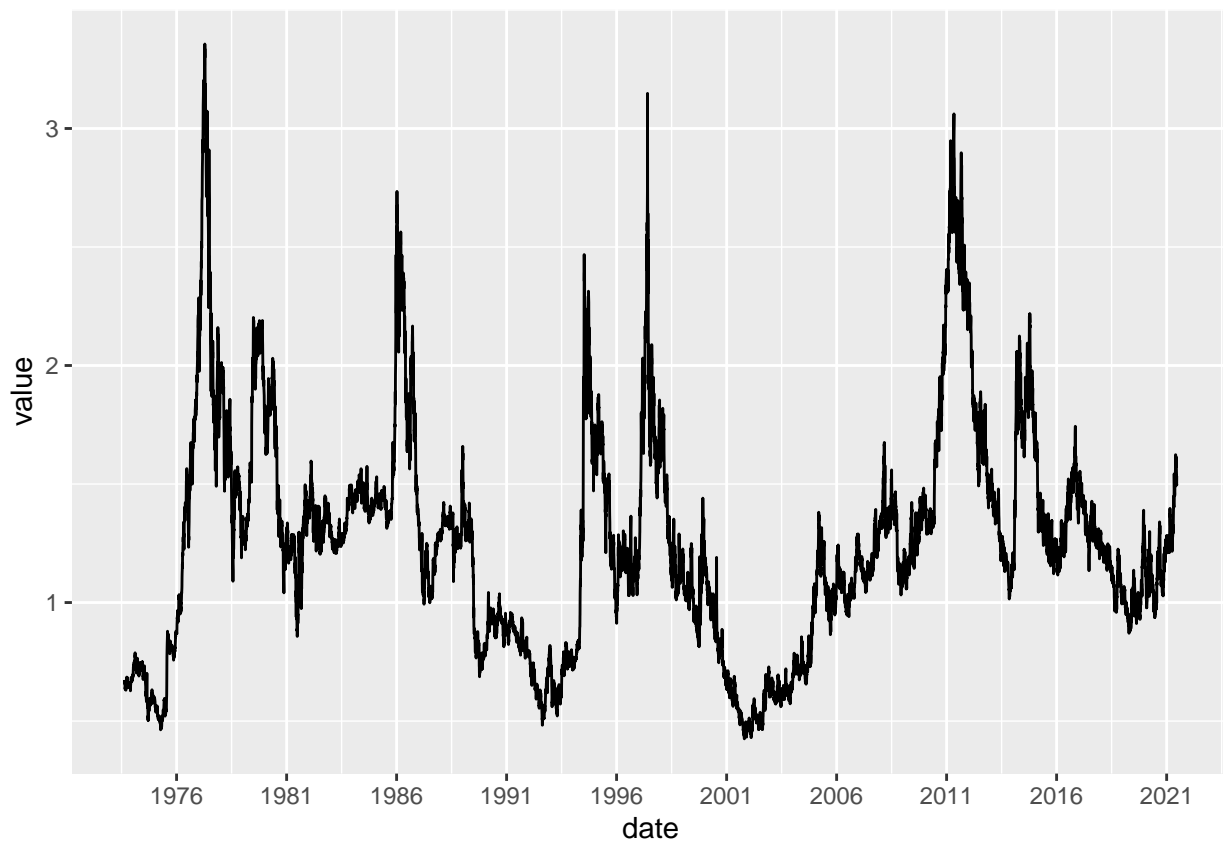
1/20/2023

R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see <http://rmarkdown.rstudio.com>.

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
df=read_csv("Coffee_Price_Since_1973.csv")
df$date<- mdy(df$date)
```



```
head(df)
```

```
## # A tibble: 6 x 2
##   date       value
##   <date>     <dbl>
```

```
## 1 1973-08-20 0.674
## 2 1973-08-21 0.671
## 3 1973-08-22 0.658
## 4 1973-08-23 0.668
## 5 1973-08-24 0.666
## 6 1973-08-27 0.659
```

```
PVF <- function (days){

  df <- df %>% mutate(past = lag(value,n=days))
  df <- df %>% mutate_at(c("value"), tibble::lst("future"=lead), n = days)

  df <- df %>% mutate(next_performance=(future/value-1)*100)
  df <- df %>% mutate(past_performance=(value/past-1)*100)

  grob = grobTree(textGrob(paste("Correlation : ", round(cor(df$past_performance, df$next_performance, use = "complete.obs"))), size = 12))

  print(cor(df$past_performance, df$next_performance, use = "complete.obs"))

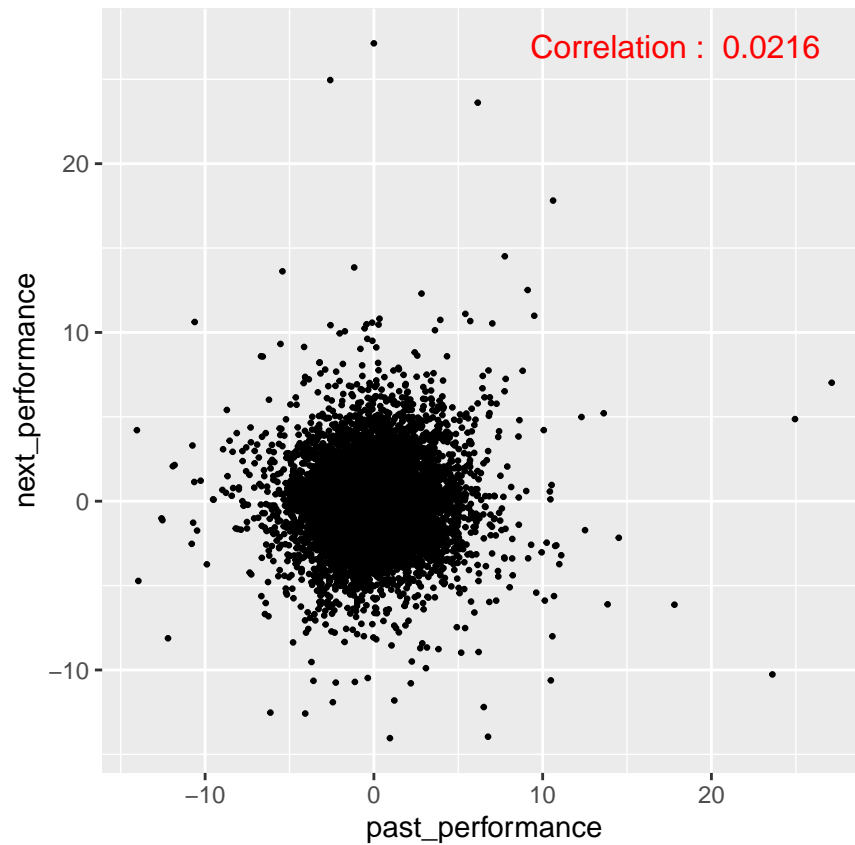
  ggplot(df, aes(x=past_performance, y=next_performance)) + geom_point(size=0.5) + annotation_custom(grob)
}
```

Past day performance vs Next day performance

```
PVF(1)
```

```
## [1] 0.02155353
```

```
## Warning: Removed 2 rows containing missing values (`geom_point()`).
```

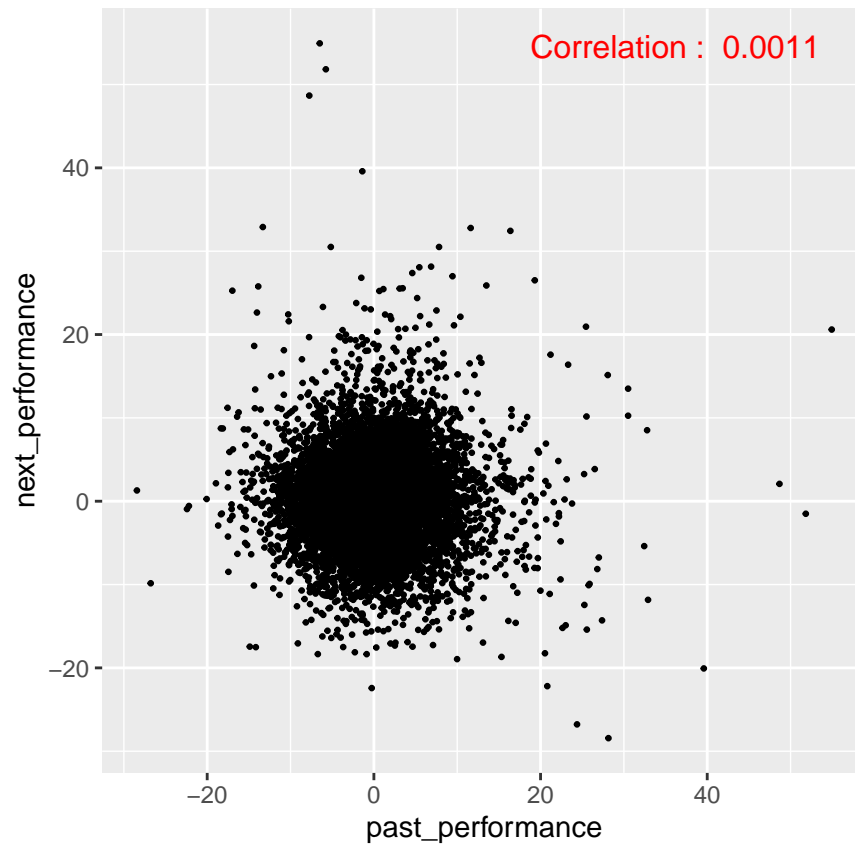


Past week performance vs Next week performance

```
PVF(5)
```

```
## [1] 0.001146729
```

```
## Warning: Removed 10 rows containing missing values (`geom_point()`).
```

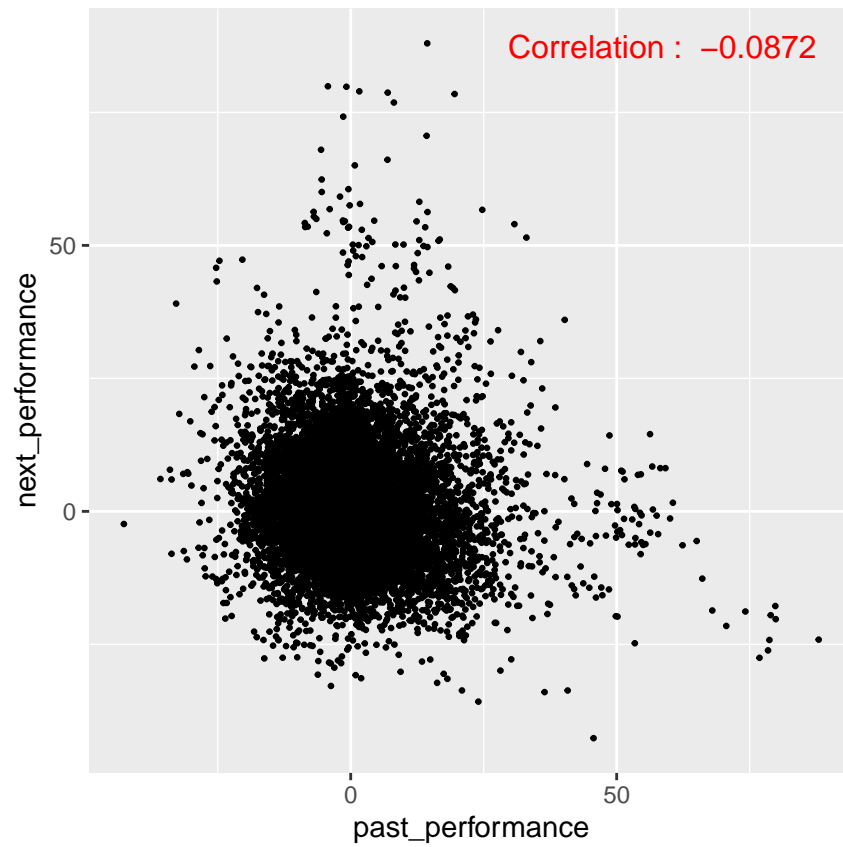


Past month performance vs Next month performance

```
PVF(20)
```

```
## [1] -0.08717568
```

```
## Warning: Removed 40 rows containing missing values (`geom_point()`).
```

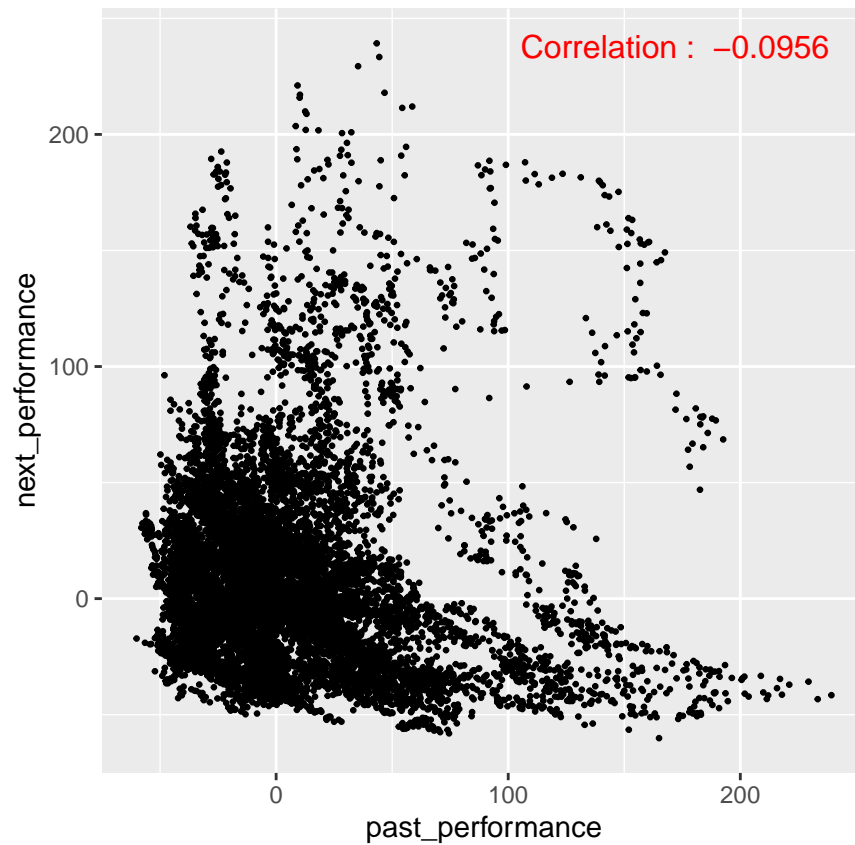


Past year performance vs Next year performance

```
PVF(240)
```

```
## [1] -0.0955847
```

```
## Warning: Removed 480 rows containing missing values (`geom_point()`).
```

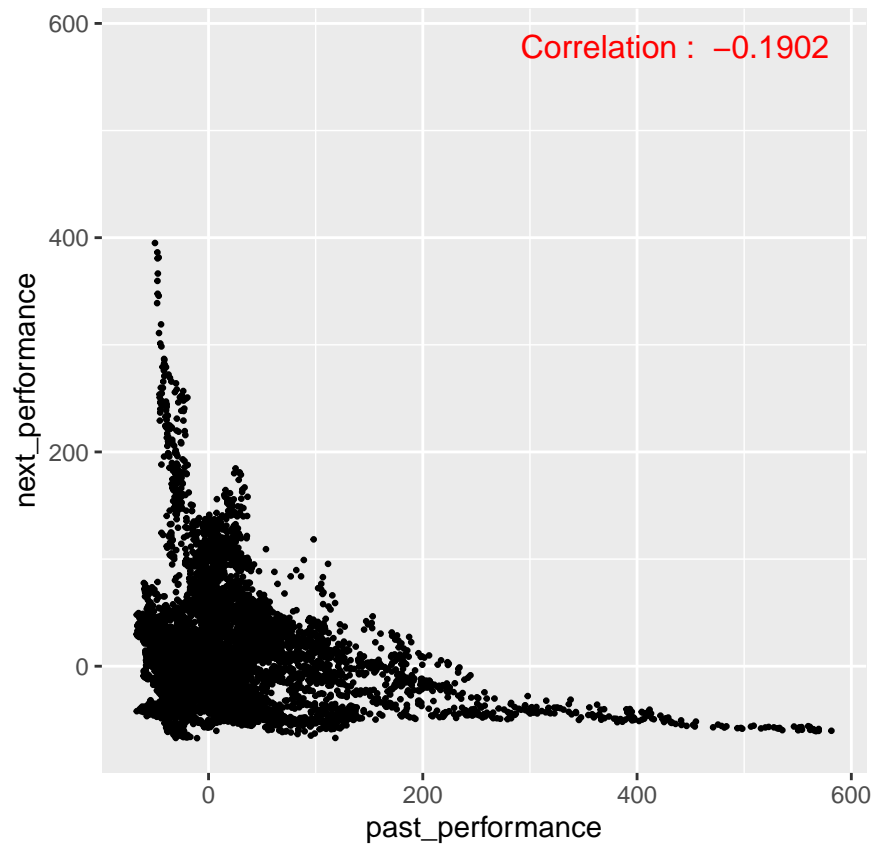


Past Two years performance vs Next Two years performance

```
PVF(480)
```

```
## [1] -0.1901636
```

```
## Warning: Removed 960 rows containing missing values (`geom_point()`).
```



Past Five years performance vs Next Five years performance

```
PVF(1200)
```

```
## [1] -0.4005611
```

```
## Warning: Removed 2400 rows containing missing values (`geom_point()`).
```

