Coffee Price Technical Analysis

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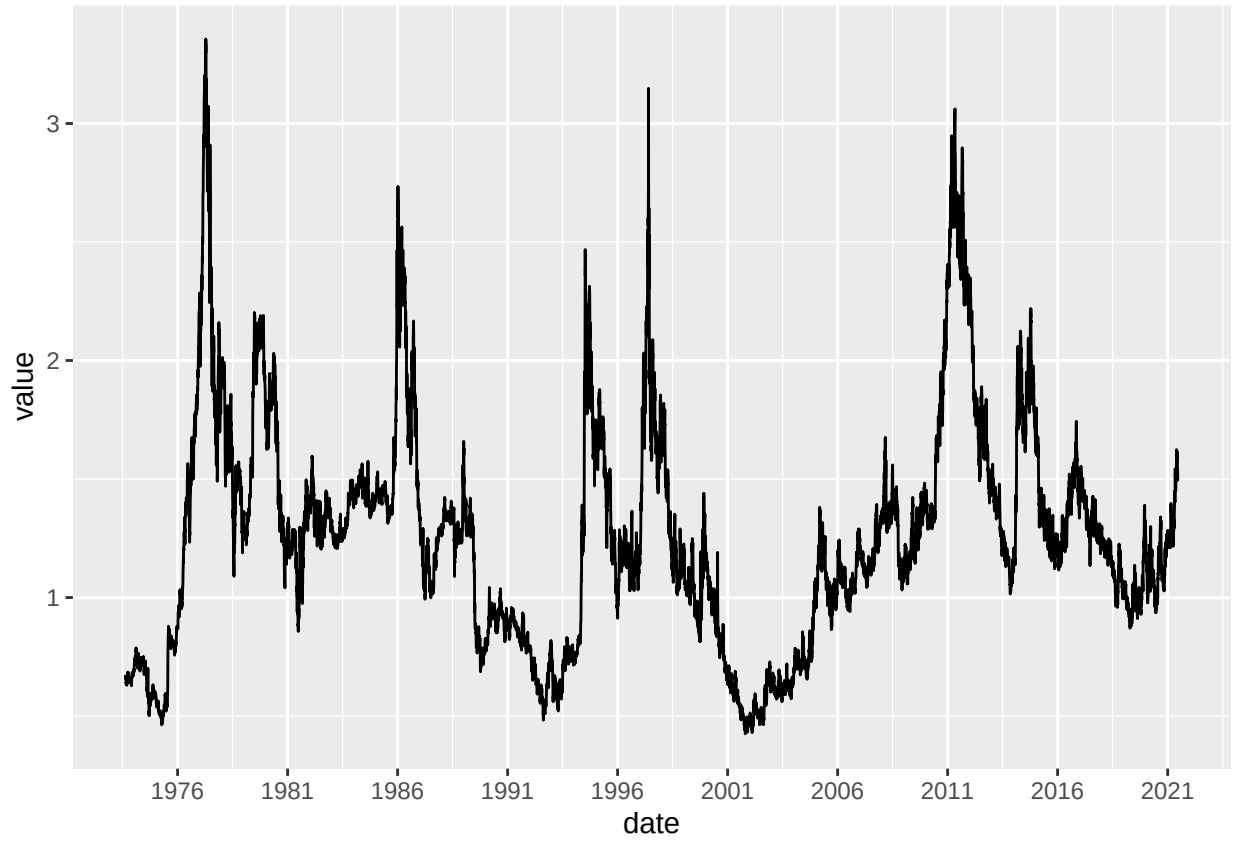
R Markdown

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
```

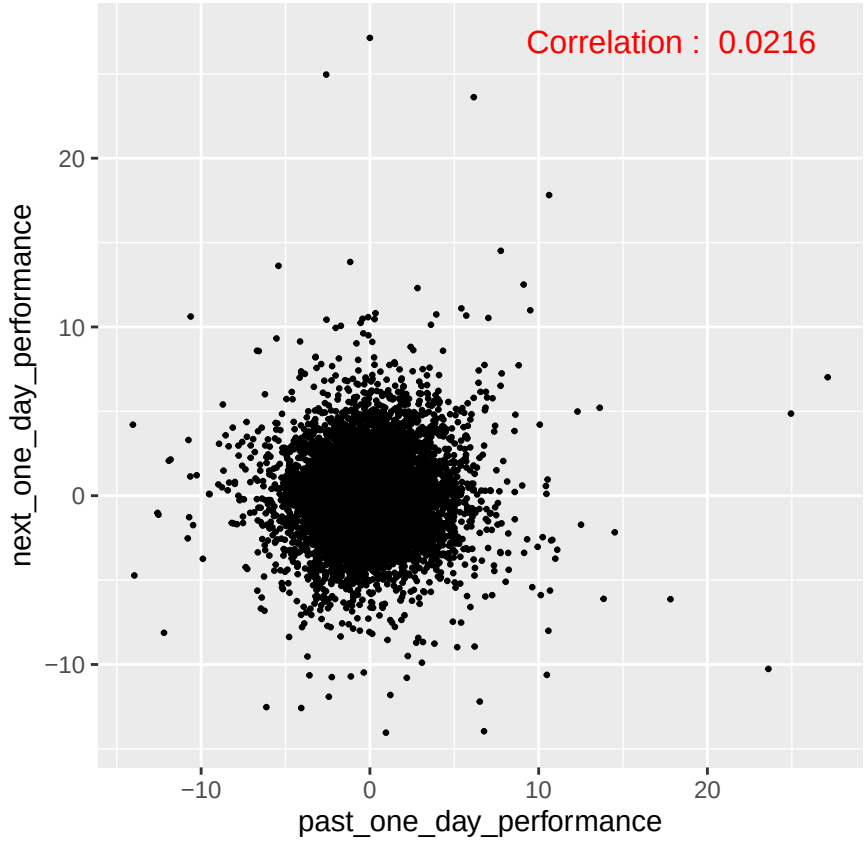
```
df <- df %>% mutate(one_day_past = lag(value,n=1))
df <- df %>% mutate_at(c("value"), tibble::lst("one_day_future"=lead), n = 1)
```

```
df <- df %>% mutate(next_one_day_performance=(one_day_future/value-1)*100)
df  <- df %>% mutate(past_one_day_performance=(value/one_day_past-1)*100)
```

```
grob = grobTree(textGrob(paste("Correlation : ", round(cor(df$past_one_day_performance, df$next_one_day_

ggplot(df, aes(x=past_one_day_performance, y=next_one_day_performance)) + geom_point(size=0.5) + annota
```

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



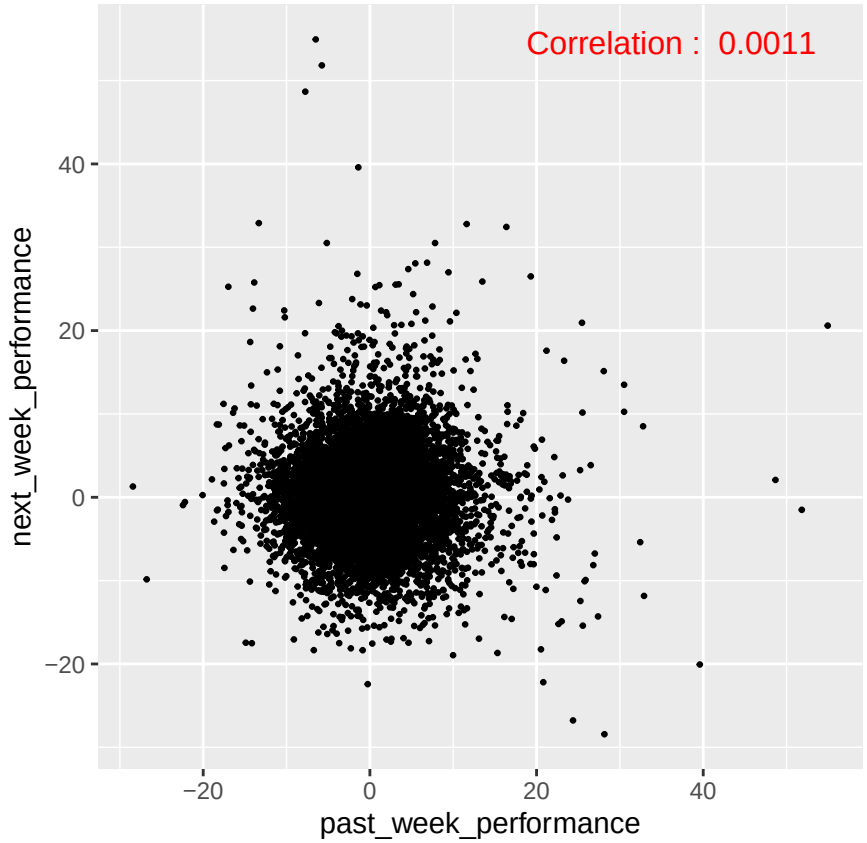

```
df <- df %>% mutate(week_past = lag(value,n=5))
df <- df %>% mutate_at(c("value"), tibble::lst("week_future"=lead), n = 5)
```

```
df <- df %>% mutate(next_week_performance=(week_future/value-1)*100)
df  <- df %>% mutate(past_week_performance=(value/week_past-1)*100)
```

```
grob = grobTree(textGrob(paste("Correlation : ", round(cor(df$past_week_performance, df$next_week_perfo

ggplot(df, aes(x=past_week_performance, y=next_week_performance)) + geom_point(size=0.5) + annotation_cu
```

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



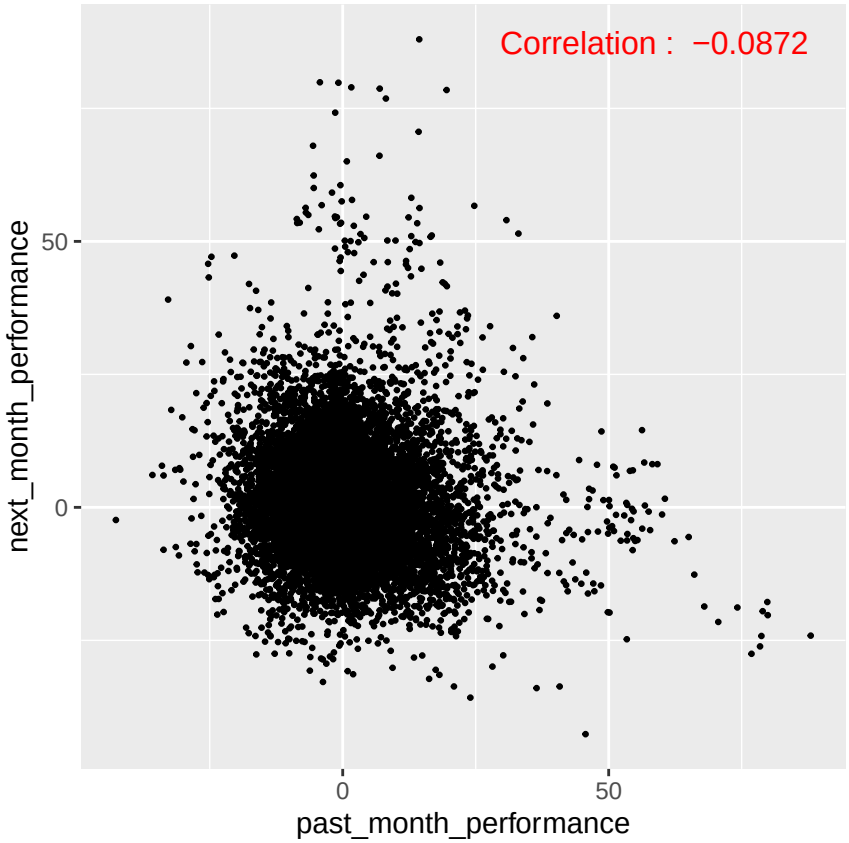

```
df <- df %>% mutate(month_past = lag(value,n=20))
df <- df %>% mutate_at(c("value"), tibble::lst("month_future"=lead), n = 20)
```

```
df <- df %>% mutate(next_month_performance=(month_future/value-1)*100)
df  <- df %>% mutate(past_month_performance=(value/month_past-1)*100)
```

```
grob = grobTree(textGrob(paste("Correlation : ", round(cor(df$past_month_performance, df$next_month_peri

ggplot(df, aes(x=past_month_performance, y=next_month_performance)) + geom_point(size=0.5) + annotation_
```

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



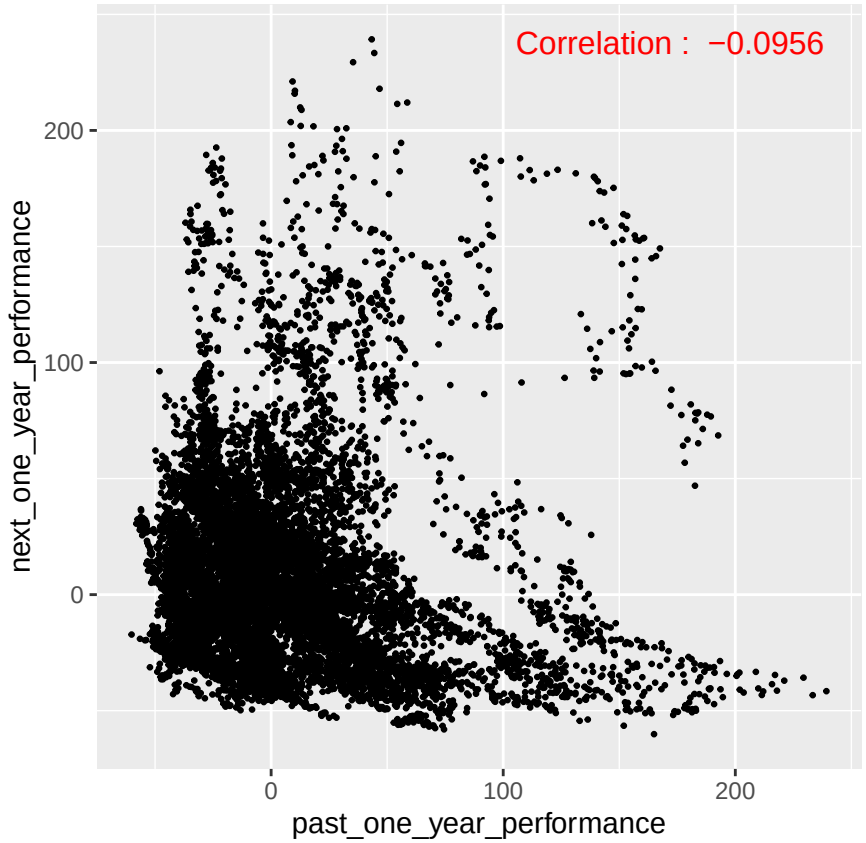

```
df <- df %>% mutate(one_year_past = lag(value,n=240))
df <- df %>% mutate_at(c("value"), tibble::lst("one_year_future"=lead), n = 240)
```

```
df <- df %>% mutate(next_one_year_performance=(one_year_future/value-1)*100)
df  <- df %>% mutate(past_one_year_performance=(value/one_year_past-1)*100)
```

```
grob = grobTree(textGrob(paste("Correlation : ", round(cor(df$past_one_year_performance, df$next_one_yea

ggplot(df, aes(x=past_one_year_performance, y=next_one_year_performance)) + geom_point(size=0.5) + annot
```

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



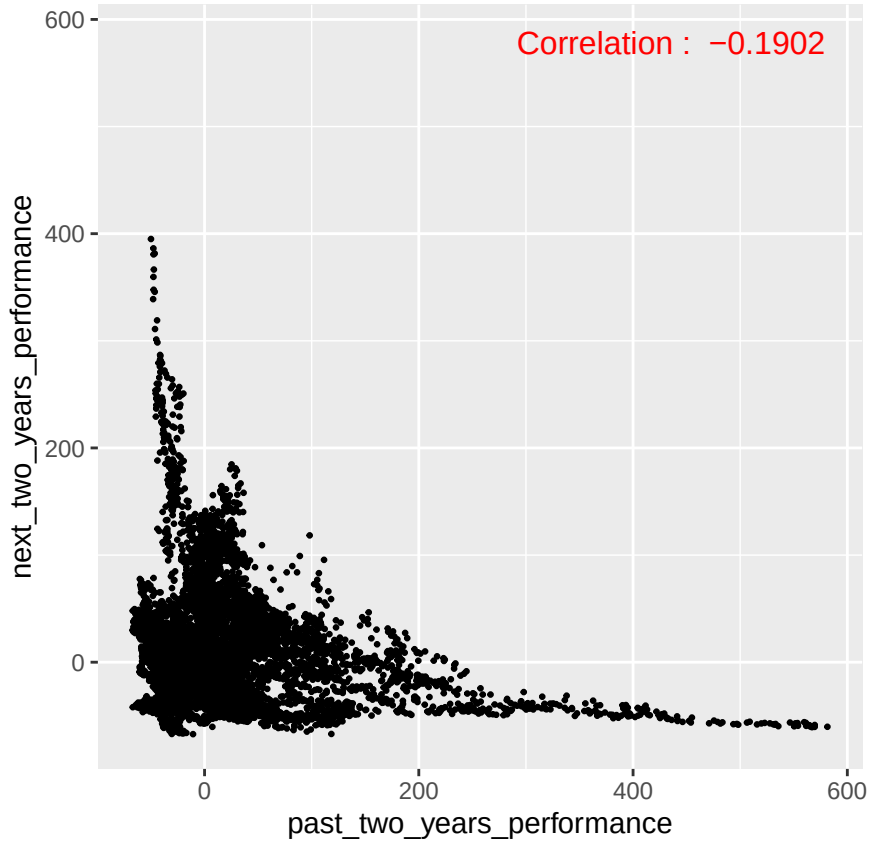

```
df <- df %>% mutate(two_years_past = lag(value,n=480))
df <- df %>% mutate_at(c("value"), tibble::lst("two_years_future"=lead), n = 480)
```

```
df <- df %>% mutate(next_two_years_performance=(two_years_future/value-1)*100)
df  <- df %>% mutate(past_two_years_performance=(value/two_years_past-1)*100)
```

```
grob = grobTree(textGrob(paste("Correlation : ", round(cor(df$past_two_years_performance, df$next_two_y

ggplot(df, aes(x=past_two_years_performance, y=next_two_years_performance)) + geom_point(size=0.5) + an
```

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



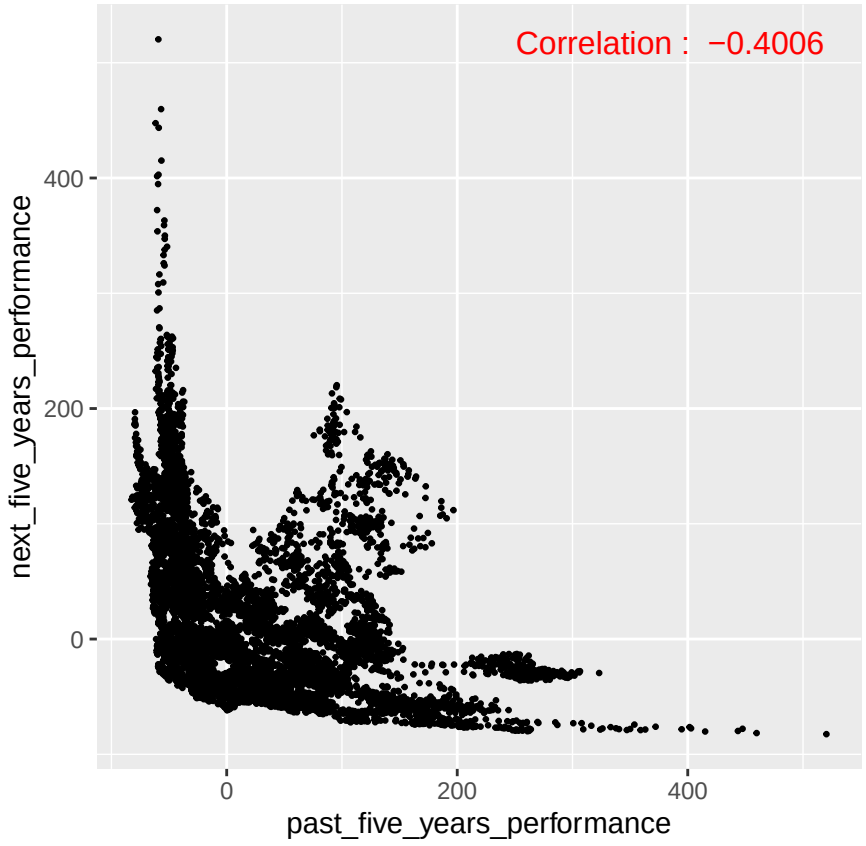

```
df <- df %>% mutate(five_years_past = lag(value,n=1200))
df <- df %>% mutate_at(c("value"), tibble::lst("five_years_future"=lead), n = 1200)
```

```
df <- df %>% mutate(next_five_years_performance=(five_years_future/value-1)*100)
df  <- df %>% mutate(past_five_years_performance=(value/five_years_past-1)*100)
```

```
grob = grobTree(textGrob(paste("Correlation : ", round(cor(df$past_five_years_performance, df$next_five_

ggplot(df, aes(x=past_five_years_performance, y=next_five_years_performance)) + geom_point(size=0.5) + a
```

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


Correlation : −0.4006
next_five_years_performance
400
200
0
0
200
400
past_five_years_performance