FMVM_Final_Project

2024-04-24

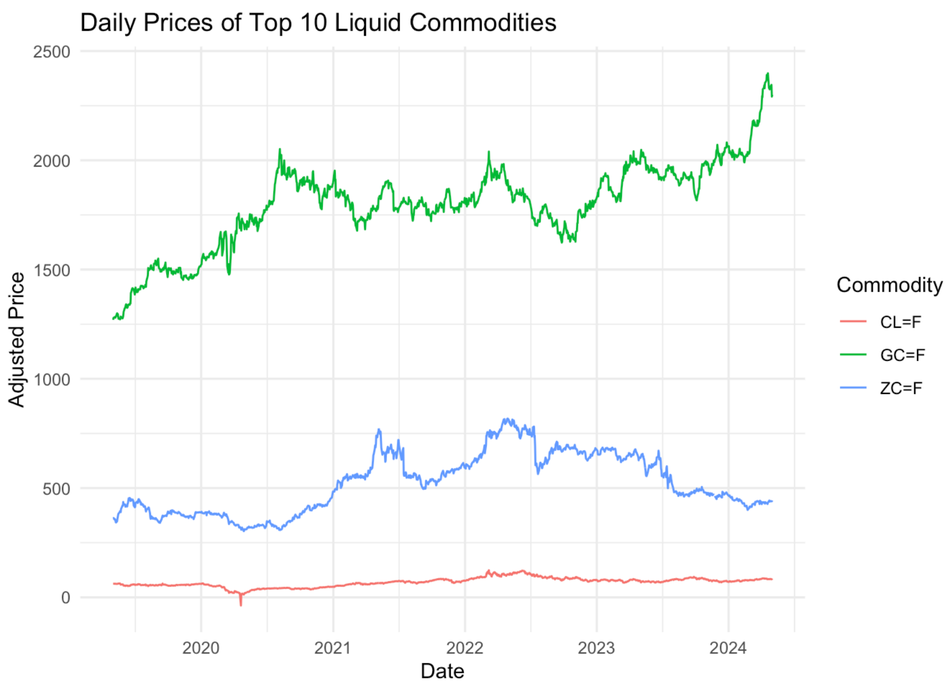
```
# Define the commodity symbols
# These are example symbols and may need to be adjusted
# commodities <- c("GC=F",   # Gold
#                  "SI=F",   # Silver
#                  "CL=F",   # Crude Oil
#                  "NG=F",   # Natural Gas
#                  "ZC=F",   # Corn
#                  "ZS=F",   # Soybeans
#                  "SB=F",   # Sugar
#                  "HG=F",   # Copper
#                  "LE=F",   # Live Cattle
#                  "PL=F")   # Platinum
commodities <- c("GC=F",   # Gold
                 "CL=F",   # Crude Oil
                 "ZC=F"  # Corn
                 )

# Fetch the data
commodity_prices <- tq_get(commodities,
                           from = '2019-05-02',  # five years from today
                           to = '2024-05-02',          # until today
                           get = "stock.prices")

# Glimpse the data
glimpse(commodity_prices)
```

```
## Rows: 3,780
## Columns: 8
## $ symbol   <chr> "GC=F", "GC=F", "GC=F", "GC=F", "GC=F", "GC=F", "GC=F", "GC=F…
## $ date     <date> 2019-05-02, 2019-05-03, 2019-05-06, 2019-05-07, 2019-05-08, …
## $ open     <dbl> 1269.2, 1270.1, 1282.2, 1280.5, 1279.4, 1278.9, 1285.4, 1286.…
## $ high     <dbl> 1270.8, 1279.2, 1282.2, 1283.5, 1279.4, 1285.0, 1286.5, 1300.…
## $ low      <dbl> 1266.6, 1270.1, 1280.3, 1280.5, 1279.4, 1278.8, 1283.3, 1281.…
## $ close    <dbl> 1269.7, 1279.2, 1281.7, 1283.5, 1279.4, 1283.5, 1285.7, 1300.…
## $ volume   <dbl> 63, 15, 12, 8, 5, 38, 6, 56, 6, 55, 3, 1, 20, 0, 0, 0, 9, 0, …
## $ adjusted <dbl> 1269.7, 1279.2, 1281.7, 1283.5, 1279.4, 1283.5, 1285.7, 1300.…
```

```
# Plot the data
commodity_prices %>%
  ggplot(aes(x = date, y = adjusted, color = symbol)) +
  geom_line() +
  labs(title = "Daily Prices of Top 10 Liquid Commodities",
       x = "Date",
       y = "Adjusted Price",
       color = "Commodity") +
  theme_minimal()
```




```
# Write the data to CSV
write_csv(commodity_prices, "commodity_prices_5_years.csv")
```