Econ 612 Assignment 1 - Empirical

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Problem 1

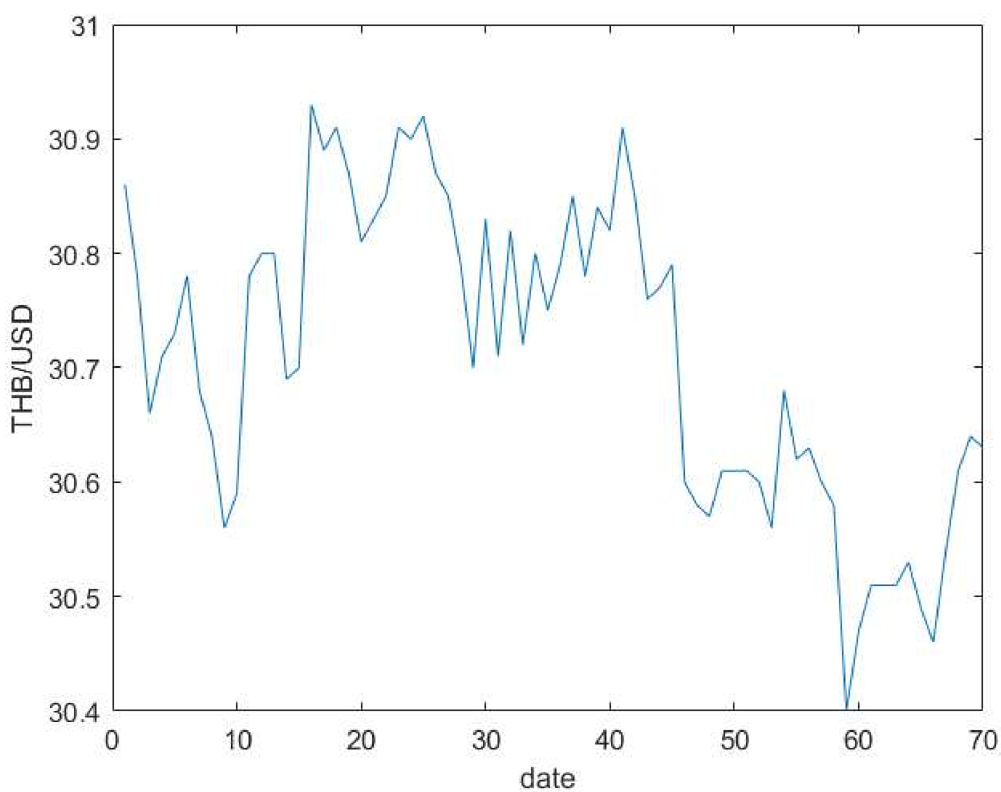
1(a) I use the 70-day time series of exchange rate (Thai Baht per Unitied States Dollar). It is a relatively stable time series with a narrow range of value, and thus, I do not take log-difference of the series.

1(b) Load the data into MATLAB

```
thbusd = readtable('usdthb.xls','range','B2:B72');
```

```
Warning: Column headers from the file were modified to make them valid MATLAB identifiers before c
names for the table. The original column headers are saved in the VariableDescriptions property.
Set 'PreserveVariableNames' to true to use the original column headers as table variable names.
```

```
thbusd = table2array(thbusd);
plot(thbusd);
xlabel('date')
ylabel('THB/USD')
```



1(C) Create a function that provides summary statistics

********sumstats function*********

```
function[stats]=sumstats(y)

    meany = mean(y);

    mediany = median(y);
```

```
    maxy = max(y);
    miny = min(y);
    sdy = std(y);
    k = kurtosis(y);
    [jbstat,p] = jbtest(y);
    label = ["mean" "median" "maximum" 'minimum' "standard deviation" "kurtosis"
                "Jarque-Bera Statistics" "Jarque-Bera P-Value"];
    value = [meany mediany maxy miny sdy k, jbstat,p];
    stats = vertcat(label,value)
end
```

```
summary = transpose(sumstats(thbusd))
```

```
summary = 8�2 string array
"mean"                      "30.7104"
"median"                    "30.715"
"maximum"                   "30.93"
"minimum"                   "30.4"
"standard deviation"        "0.134858"
"kurtosis"                  "2.00452"
"Jarque-Bera Statistics"    "0"
"Jarque-Bera P-Value"       "0.0967981"
```